### Figure 1

## Amino acid sequence of GCLM (NP\_002052.1; SEQ ID No: 10)

- 1 MGTDSRAAKA LLARARTLHL QTGNLLNWGR LRKKCPSTHS EELHDCIQKT LNEWSSQINP 61 DLVREFPDVL ECTVSHAVEK INPDEREEMK VSAKLFIVES NSSSSTRSAV DMACSVLGVA 121 QLDSVIIASP PIEDGVNLSL EHLQPYWEEL ENLVQSKKIV AIGTSDLDKT QLEQLYQWAQ
- 181 VKPNSNQVNL ASCCVMPPDL TAFAKQFDIQ LLTHNDPKEL LSEASFQEAL QESIPDIQAH
- 241 EWVPLWLLRY SVIVKSRGII KSKGYILQAK RRGS

## Amino acid sequence of GSS (NP\_000169.1; SEQ ID No: 11)

- 1 MATNWGSLLQ DKQQLEELAR QAVDRALAEG VLLRTSQEPT SSEVVSYAPF TLFPSLVPSA
- 61 LLEQAYAVQM DFNLLVDAVS QNAAFLEQTL SSTIKQDDFT ARLFDIHKQV LKEGIAQTVF
- 121 LGLNRSDYMF QRSADGSPAL KQIEINTISA SFGGLASRTP AVHRHVLSVL SKTKEAGKIL
- 181 SNNPSKGLAL GIAKAWELYG SPNALVLLIA QEKERNIFDQ RAIENELLAR NIHVIRRTFE
- 241 DISEKGSLDQ DRRLFVDGQE IAVVYFRDGY MPRQYSLQNW EARLLLERSH AAKCPDIATQ 301 LAGTKKVQQE LSRPGMLEML LPGQPEAVAR LRATFAGLYS LDVGEEGDQA IAEALAAPSR
- 361 FVLKPQREGG GNNLYGEEMV QALKQLKDSE ERASYILMEK IEPEPFENCL LRPGSPARVV
- 421 QCISELGIFG VYVRQEKTLV MNKHVGHLLR TKAIEHADGG VAAGVAVLDN PYPV

## Amino acid sequence of GPX1 (NP\_000572.2, SEQ ID No: 12)

- 1 MCAARLAAAA AQSVYAFSAR PLAGGEPVSL GSLRGKVLLI ENVASLXGTT VRDYTQMNEL
- 61 QRRLGPRGLV VLGFPCNQFG HQENAKNEEI LNSLKYVRPG GGFEPNFMLF EKCEVNGAGA
- 121 HPLFAFLREA LPAPSDDATA LMTDPKLITW SPVCRNDVAW NFEKFLVGPD GVPLRRYSRR
- 181 FQTIDIEPDI EALLSQGPSC A

#### Amino acid sequence of system Xc (NP\_055146, xCT; SEQ ID No: 13)

- 1 MVRKPVVSTI SKGGYLQGNV NGRLPSLGNK EPPGQEKVQL KRKVTLLRGV SIIIGTIIGA
- 61 GIFISPKGVL QNTGSVGMSL TIWTVCGVLS LFGALSYAEL GTTIKKSGGH YTYILEVFGP
- 121 LPAFVRVWVE LLIIRPAATA VISLAFGRYI LEPFFIQCEI PELAIKLITA VGITVVMVLN
- 181 SMSVSWSARI QIFLTFCKLT AILIIIVPGV MQLIKGQTQN FKDAFSGRDS SITRLPLAFY
- 241 YGMYAYAGWF YLNFVTEEVE NPEKTIPLAI CISMAIVTIG YVLTNVAYFT TINAEELLLS
- 301 NAVAVTFSER LLGNFSLAVP IFVALSCFGS MNGGVFAVSR LFYVASREGH LPEILSMIHV.
- 361 RKHTPLPAVI VLHPLTMIML FSGDLDSLLN FLSFARWLFI GLAVAGLIYL RYKCPDMHRP
- 421 FKVPLFIPAL FSFTCLFMVA LSLYSDPFST GIGFVITLTG VPAYYLFIIW DKKPRWFRIM
- 481 SEKITRTLQI ILEVVPEEDK L

Figure 2

# Nucleic acid sequence of GCLM (SEQ ID No: 14)

cccgcegceg cccagccgc gtccggcctc cctcgggccc gagcgcagac caggctcag 121 ccgcgcggcg ccggcagcct cgcctcct ctctcgggcct tctcgggccct cgcgcagcct 181 gtcctgtggg ccgcagcct cctgcccgcc cgcccgcagc cccttgcctg ccggcaccgc 181 ggcgcccgt gccatgggca ccgacagccg cgccgcaag gcgctctgctg ccgggccctg 181 ggcgccctt gccatgggca ccgacagccg cgccgcaag gcgctctgg cgcgggcccg 182 gccacgcac ctgcagacgg ggaacctgct gaactgggg cgcctctgg cgcgggcccg 182 gtccacgcac agcgagagc ttcatgattg tatccaaaaa accttgaatg aatggagttc 182 tcaatgaaa aagataaatc ctgatgaaag agaagaaatg atggaatgca ctgatgaaa 183 tcaatgttcc ttggagcat tacaacctat tagaagtgca gttgacatgg cctgttcagt 184 gccaccagat ttgacgaaa gtacctctga tcaagagagaa ttaggaggt 185 tcaataagaa cagaaaac caaatagaa cattgacaaa acacagttgg aacagtgag 186 tcaacagaa ttgaccatag gtacctctga tctagacaa acacagttgg aacagtgag 186 tcaaaaagaa ttgaccatag gtacctctga tctagacaa acacagttgg aacagctgta 187 tcaaaaagaa ctgctttctg aagcaagtt ccaagaagct cttcaggaaa gcattcctga 188 tcagatata tatttttc cttaaacca ttgaaccaa tttacttcaac 188 tcagatata tttggcctag gtaccacat ttgacaaaa cacagttga cataacttac ctgtaattc cttcaatata ttagaaaact tagtttaacaa 188 ttagatatat tttggccaag gtaccacat ttaaaccaag caatttttt taaaaccaag aacttgtaa 188 ttagatatat tttggcaagaa gatttttt cttaaatta cagattaat caaattgat 188 ttagatatat tttggcaaga aactatca ctgtaatttc cttaattta aaattcaat aattgtta 189 aaactgaaat aatttttc taaaccatta ctgtcattga caaattgat caaattgat 189 aaactgaaat aattggtaa aatttttt cttaatttt aaaaccaag caatttttt 189 aaactgaaat aattgcttct taaaccatt taaaccaag caatttttt 189 aaactgaaat aattgcttct taaaccatta ctgtcattga taaaccaag caatttttt 189 aaactgaaat aattggaaga gattatttt cttaaatta caatttttt tatcaaaca caagttgata 180 aaactgaaat aattggaaga gattattttc cttaattta taaaccaag caatttaat taaaccaag caatttaat taaaccaag caatttaat caaactgaa aactgatgaa aacagttgaaaccaat ttaaaccaag caatttaat caaattgata aacagaagaa cttcaaaccaaccaaccaaccaaccaaccaaccaacc	1.	ggcacgaggc	tgcggccgca	gtagccggag	ccggagccgc	agccaccggt	gccttccttt
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gccaccagat ttgactgcat ttgctaaaca atttgacata cagctgttga ctcacaatga yot tccaaaagaa ctgctttctg aagcaagttt ccaagaagct cttcaggaaa gcattcctga yot cattcaagcg cacgagtggg tgccgctgtg gctactgcgg tattcggtca ttgtgaaaag toll tagaggaatt atcaaatcaa aaggctacat tttacaagct aaaagaaggg gttcttaact toll gacttaggag cataacttac ctgtaatttc cttcaatatg agagaaaatt gagatgtga tattagtt actgcctgta aatggtgtca ttgaggcaga tattctttcg tcatatttga toll cagtatgttg tctgtcaagt tttaaatact tatcttgcct ccatatcaat ccattctcat gaacctctgt attgcttcc ttaaactatt gtttctaat tgaaattgtc tataaagaaa tatacttgcaa tatattttc ctttattttt atgactaata taaatcaaga aaatttgttg tagatatat tttggcctag gtatcagggt aatgtatata catatttttt attccaaaa taaaatcatt aattgcttc taacctttat tataaccaag caatttaatt acaattgtta aaaactgaaat actggaagaa gatattttc ctgtcattga tgagatatat cagagtaact	721	caaaaagatt	gttgccatag	gtacctctga	tctagacaaa	acacagttgg	aacagctgta
tccaaaagaa ctgcttctg aagcaagtt ccaagaagct cttcaggaaa gcattcctga gcattcaagcg cacgagtggg tgccgctgtg gctactgcgg tattcggtca ttgtgaaaag 1021 tagaggaatt atcaaatcaa aaggctacat tttacaagct aaaagaaggg gttcttaact 1081 gacttaggag cataacttac ctgtaatttc cttcaatatg agagaaaatt gagatgtgta 1141 aaatctagtt actgcctgta aatggtgtca ttgaggcaga tattctttcg tcatatttga 1201 cagtatgttg tctgtcaagt tttaaatact tatcttgcct ccatatcaat ccattctcat 1261 gaacctctgt attgcttcc ttaaactatt gtttctaat tgaaattgtc tataaagaaa 1321 atacttgcaa tatattttc ctttatttt atgactaata taaatcaaga aaatttgttg 1381 ttagatatat tttggcctag gtatcagggt aatgtatata catatttttt attccaaaaa 1441 aaaattcatt aattgcttct taacctttat tataaccaag caatttaatt acaattgtta 1501 aaactgaaat actggaagaa gatatttttc ctgtcattga tgagatatat cagagtaact	781	tcagtgggca	caggtaaaac	caaatagtaa	ccaagttaat	cttgcctcct	gctgtgtgat
cattcaagcg cacgagtggg tgccgctgtg gctactgcgg tattcggtca ttgtgaaaag 1021 tagaggaatt atcaaatcaa aaggctacat tttacaagct aaaagaaggg gttcttaact 1081 gacttaggag cataacttac ctgtaatttc cttcaatatg agagaaaatt gagatgtgta 1141 aaatctagtt actgcctgta aatggtgtca ttgaggcaga tattctttcg tcatatttga 1201 cagtatgttg tctgtcaagt tttaaatact tatcttgcct ccatatcaat ccattctcat 1261 gaacctctgt attgcttcc ttaaactatt gtttctaat tgaaattgtc tataaagaaa 1321 atacttgcaa tatattttc ctttatttt atgactaata taaatcaaga aaatttgttg 1381 ttagatatat tttggcctag gtatcagggt aatgtatata catattttt attccaaaa 1441 aaaattcatt aattgcttct taactcttat tataaccaag caatttaatt acaattgtta 1501 aaactgaaat actggaagaa gatattttc ctgtcattga tgagatatat cagagtaact	841	gccaccagat	ttgactgcat	ttgctaaaca	atttgacata	cagctgttga	ctcacaatga
1021 tagaggaatt atcaaatcaa aaggctacat tttacaagct aaaagaaggg gttcttaact 1081 gacttaggag cataacttac ctgtaatttc cttcaatatg agagaaaatt gagatgtgta 1141 aaatctagtt actgcctgta aatggtgtca ttgaggcaga tattctttcg tcatatttga 1201 cagtatgttg tctgtcaagt tttaaatact tatcttgcct ccatatcaat ccattctcat 1261 gaacctctgt attgcttcc ttaaactatt gtttctaat tgaaattgtc tataaagaaa 1321 atacttgcaa tatatttttc ctttattttt atgactaata taaatcaaga aaatttgttg 1381 ttagatatat tttggcctag gtatcagggt aatgtatata catatttttt attccaaaa 1441 aaaattcatt aattgcttct taactcttat tataaccaag caatttaatt acaattgtta 1501 aaactgaaat actggaagaa gatatttttc ctgtcattga tgagatatat cagagtaact	901						
1081 gacttaggag cataacttac ctgtaatttc cttcaatatg agagaaaatt gagatgtgta 1141 aaatctagtt actgcctgta aatggtgtca ttgaggcaga tattctttcg tcatattga 1201 cagtatgttg tctgtcaagt tttaaatact tatcttgcct ccatatcaat ccattctcat 1261 gaacctctgt attgctttcc ttaaactatt gtttctaat tgaaattgtc tataaagaaa 1321 atacttgcaa tatatttttc ctttattttt atgactaata taaatcaaga aaatttgttg 1381 ttagatatat tttggcctag gtatcagggt aatgtatata catatttttt atttccaaaa 1441 aaaattcatt aattgcttct taactcttat tataaccaag caatttaatt acaattgtta 1501 aaactgaaat actggaagaa gatatttttc ctgtcattga tgagatatat cagagtaact	961	cattcaagcg	cacgagtggg	tgccgctgtg	gctactgcgg	tattcggtca	ttgtgaaaag
1141 aaatctagtt actgootgta aatggtgtca ttgaggcaga tattotttog toatatttga 1201 cagtatgttg totgtcaagt tttaaatact tatottgcot coatatcaat coattotcat 1261 gaacctotgt attgotttoo ttaaactatt gttttotaat tgaaattgto tataaagaaa 1321 atacttgcaa tatattttto otttattttt atgactaata taaatcaaga aaatttgttg 1381 ttagatatat tttggcotag gtatoagggt aatgtatata catatttttt atttocaaaa 1441 aaaattcatt aattgottot taactottat tataaccaag caatttaatt acaattgtta 1501 aaactgaaat actggaagaa gatattttto otgtcattga tgagatatat cagagtaact	102						
1201 cagtatgitg totgtoaagt titaaatact tatotigoot coatatoaat coattotoat 1261 gaacototgt attgottico titaaactati gittiotaat tgaaatigio tataaagaaa 1321 ataotigoaa tatatittic oittattiti atgaotaata taaatoaaga aaattigitg 1381 titagatatat titigootag giatoagggi aatgiatata catatititi attiooaaaa 1441 aaaattoati aatigottoi taaotottat tataacoaag caatitaati acaatigita 1501 aaactgaaat actggaagaa gatatititi oigtoattga tgagatatat cagagtaact	108	l gacttaggag	cataacttac	ctgtaatttc	cttcaatatg	agagaaaatt	gagatgtgta
1261 gaacctctgt attgctttcc ttaaactatt gttttctaat tgaaattgtc tataaagaaa 1321 atacttgcaa tatatttttc ctttattttt atgactaata taaatcaaga aaatttgttg 1381 ttagatatat tttggcctag gtatcagggt aatgtatata catatttttt atttccaaaa 1441 aaaattcatt aattgcttct taactcttat tataaccaag caatttaatt acaattgtta 1501 aaactgaaat actggaagaa gatatttttc ctgtcattga tgagatatat cagagtaact	114						
1321 atacttgcaa tatatttttc ctttattttt atgactaata taaatcaaga aaatttgttg 1381 ttagatatat tttggcctag gtatcagggt aatgtatata catatttttt atttccaaaa 1441 aaaattcatt aattgcttct taactcttat tataaccaag caatttaatt acaattgtta 1501 aaactgaaat actggaagaa gatatttttc ctgtcattga tgagatatat cagagtaact	120						
1381 ttagatatat tttggcctag gtatcagggt aatgtatata catattttt atttccaaaa 1441 aaaattcatt aattgcttct taactcttat tataaccaag caatttaatt acaattgtta 1501 aaactgaaat actggaagaa gatatttttc ctgtcattga tgagatatat cagagtaact	126						
1441 aaaattcatt aattgottot taactottat tataaccaag caatttaatt acaattgtta 1501 aaactgaaat actggaagaa gatattttto otgtoattga tgagatatat cagagtaact	132	l atacttgcaa	tatattttc	ctttatttt	atgactaata	taaatcaaga	aaatttgttg
1501 aaactgaaat actggaagaa gatatttttc ctgtcattga tgagatatat cagagtaact	138	l ttagatatat	tttggcctag	gtatcagggt	aatgtatata	catattttt	atttccaaaa
1501 aaactgaaat actggaagaa gatatttttc ctgtcattga tgagatatat cagagtaact 1561 ggagtagctg ggatttacta gtagtgtaaa taaaattcac tcttcaatac	144						
1561 ggagtagetg ggatttaeta gtagtgtaaa taaaattcae tetteaatae	150	l aaactgaaat	actggaagaa	gatattttc	ctgtcattga	tgagatatat	cagagtaact
	156	l ggagtagctg	ggatttacta	gtagtgtaaa	taaaattcac	tcttcaatac	

Figure 3

Nucleic acid sequence of GSS (SEQ ID No: 15)

1	gaggccccgc	cccctgagcc	tgggtagcgg	cgcgagggcc	gggagaaccg	ttcgcggagg
61	aaaggcgaac	tagtgttggg	atggccacca	actgggggag	cctcttgcag	gataaacagc
121	agctagagga	gctggcacgg	caggccgtgg	accgggccct	ggctgaggga	gtattgctga
181	ggacctcaca	ggagcccact	tcctcggagg	tggtgagcta	tgccccattc	acgctcttcc
241					tgtgcagatg	
301	tgctagtgga	tgctgtcagc	cagaacgctg	ccttcctgga	gcaaactctt	tccagcacca
361	tcaaacagga	tgactttacc	gctcgtctct	ttgacatcca	caagcaagtc	ctaaaagagg
421	gcattgccca	gactgtgttc	ctgggcctga	atcgctcaga	ctacatgttc	cagcgcagcg
481	cagatggctc	cccagccctg	aaacagatcg	aaatcaacac	catctctgcc	agctttgggg
541	gcctggcctc	ccggacccca	gctgtgcacc	gacatgttct	cagtgtcctg	agtaagacca
601	aagaagctgg	caagatcctc	tctaataatc	ccagcaaggg	actggccctg	ggaattgcca
661	aagcctggga	gctctacggc	tcacccaatg	ctctggtgct	actgattgct	caagagaagg
721	aaagaaacat	atttgaccag	cgtgccatag	agaatgagct	actggccagg	aacatccatg
781	tgatccgacg	aacatttgaa	gatatctctg	aaaaggggtc	tctggaccaa	gaccgaaggc
841	tgtttgtgga	tggccaggaa	attgctgtgg	tttacttccg	ggatggctac	atgcctcgtc
901	agtacagtct	acagaattgg	gaagcacgtc	tactgctgga	gaggtcacat	gctgccaagt
961	gcccagacat	tgccacccag	ctggctggga	ctaagaaggt	gcagcaggag	ctaagcaggc
1021	cgggcatgct	ggagatgttg	ctccctggcc	agcctgaggc	tgtggcccgc	ctccgcgcca
1081	cctttgctgg	cctctactca	ctggatgtgg	gtgaagaagg	ggaccaggcc	atcgccgagg
1141					agagggtgga	
1201					ggacagtgag	
1261	cctacatcct	catggagaag	atcgaacctg	agccttttga	gaattgcctg	ctacggcctg
1321					catctttggg	
1381	ggcaggaaaa	gacactcgtg	atgaacaagc	acgtggggca	tctacttcga	accaaagcca
1441					cctggacaac	
1501					tatttgtcat	
1561					ttatggaagg	
1621	gtaccttccc	ccagctttcc	atctgaggac	cagaaaagtt	gtgtctccct	tagatgagat
1681					ggtaagctgc	
1741	aggtccatga	accctgcccc	actcctgtca	gcccctcatc	agccttttca	gcaggttcca
1801	gtgcctgact	tgggatagga	ctgagtggta	ggaggagggg	gagtggaggg	gcatagcctt
1861	tccctaattc	tgccttaaat	aaaactgcat	tgctgattca	aaaaaaaaa	aaaaaaaa

Figure 4

# Nucleic acid sequence of GPX1 (SEQ ID No: 16)

```
cgacccctcg aggggcccag ccttggaagg gtaactggac cgctgccgcc tggttgcctg
     ggccagacca gacatgcctg ctgctccttc cggcttagga ggagcacgcg tcccgctcgg
61
121
     gegeactete cageetttte etggetgagg aggggeegag ceteeggtag ggegggggee
    ggatgaggeg ggaeeteagg ceeggaaaac tgeetgtgee aegtgaeeeg eegeeggeea
241
     gttaaaagga ggcgcctgct ggcctcccct tacagtgctt gttcggggcg ctccgctggc
     ttettggaca attgegecat gtgtgetget eggetagegg eggeggegge ceagteggtg
301
     tatgeettet eggegegee gttggeegge ggggageetg tgageetggg etecetgegg ggeaaggtae taettatega gaatgtggeg teeetetgag geaecaeggt eegggaetae
361
421
     acccagatga acgagetgca geggegeete ggaceceggg geetggtggt geteggette
481
     ccgtgcaacc agtttgggca tcaggagaac gccaagaacg aagagattct gaattccctc
601
     aagtacgtcc ggcctggtgg tgggttcgag cccaacttca tgctcttcga gaagtgcgag
661
    gtgaacggtg cggggggcgca ccctctcttc gccttcctgc gggaggccct gccagctccc
721
     agegacgacg ccaccgcgct tatgaccgac cccaagctca tcacctggtc tccggtgtgt
     cgcaacgatg ttgcctggaa ctttgagaag ttcctggtgg gccctgacgg tgtgccccta
781
841 cgcaggtaca gccgccgctt ccagaccatt gacatcgagc ctgacatcga agccctgctg
901 teteaaggge ceagetgtge etagggegee ceteetacee eggetgettg geagttgeag
961 tgctgctgtc tcgggggggt tttcatctat gagggtgttt cctctaaacc tacgagggag
1021 gaacacettg atettacaga aaataccace tegagatggg tgetggteet gttgatecca
1081 gtctctgcca gaccaaggcg agtttcccca ctaataaagt gccgggtgtc agca
```

Figure 5 Nucleic acid sequence of system Xc (xCT; SEQ ID No: 17)

1	atggtcagaa	agcctgttgt	gtccaccatc	tccaaaggag	gttacctgca	gggaaatgtt
61					ggcaggagaa	
121					ttggcaccat	
181					gcagcgtggg	
241					ctttgtctta	_
301	ggaacaacta	taaagaaatc	tagaagtcat	tacacatata	ttttggaagt	ctttqqtcca
361					tacgccctgc	
421	_				tttttattca	_
481					ctgtagtgat	
541					taaccttttg	
601					ttaaaggtca	
661					ggttgccact	
721				-	ttgttactga	
781		_			tggccattgt	
841					ctgaggagct	
901					atttctcatt	
961					gtgtgtttgc	
1021		_			tcctctccat	
1081	_			_	ctttgacaat	-
1141					ttgccaggtg	
1201					gcccagatat	
1261					catgcctctt	
1321					tcgtcatcac	
1381					ccaggtggtt	
					ttgtaccaga	
					ggggagacac	
					tggtgataaa	
		-			tttctaagaa	
1681					atgagtcgca	
1741					gacaattact	
1801					tgaagactga	
	tatatataga	ttttgtaaag	atggttttac	acactacaga	tgtctatact	gtgaaaagtg
1921	ttttcaattc	tgaaaaaaag	catacatcat	gattatggca	aagaggagag	aaagaaattt
1981	attttacatt	gacattgcat	tacttaccat	tagataccaa	tttägataac	aaacactcat
2041					agtggggatt	
2101	ttaaagaaga	gtttctaggg	actactattt	atgagagaga	tccaggagtt	atotttaagt
2161					tcattatcag	
				-	aagtgtataa	
					cacctgtttc	
					ttcaaattac	
2401	_			_	tcccatatct	
					tggctatttt	
2521	_				attcttctgt	
2581					tattaacata	
2641					tagáaaattt	
2701					tcaacttgca	
2761					gtttgtgttc	
2821					ggcttacatc	
2881					gagttctaga	
2941					agctgggcat	
3001					ttgcttgaac	
3061	gaggttgcag	tgagccaaga	ttgcaccact	gtactccage	ctgggtgaca	aagtcagact
	ccatctccaa			0		jourgaou

Figure 6: Nucleic acid sequence of GCLM: NT\_028050, position 9380597-9403950.

(SEQ ID No: 18)

ATCAAAATGTGTTTAAGTAGTGGTGGTGCTTGTGGGTAGCTCTTTCACTATAATAAAAAA TCAATATCCAAAAAAAAAAAAAAAAAGCAGCGCAAGCTCGTTCAATGAACTCTTACCATC ATTCATTCAGCCAACAATATTTACTCAACATCAGGCTCAATTTCTAACTTCCTAGAAAG ATCTTTTTCCCATCCCTCCCTAATTCTTACCATTTTACCAACTGGTTCATCTCTCTTT TCAATAGCTATATTGTCCCCGCTTATAATGAGAATCTCATTTTGCCTTTAATAATCTGAT TCACCTCAACGAATGTGAAAGATTGTTGAGGAAAGCTCAATACATGTTCAATTTGATGTT TATACCGAGTCCACCACCACACGTGAAATTTAATAGGGGTAAATAATCTCGACCACCTCT AAAGGGGTGGTGATAAAAGCTTTCTGTGATCTCACCGGCTCAAGTGTCCTCTTTAATCT GAATTCATCTGGAGAATAACTGCCCTATGATGTTCTTATAAAATTACTTGTTTCCTGTGC TTAGAACTTGTCTCTGGGTAGAGTGTACGCGTCTCAAGGGCAAAGACTCAGTCTTGTTCG TTGACTTCACACACTGCCAGCAAATAATGTGAATCAATAGACCTTTAACGGATGAAGAAA AATTAGCAGTTTGGGAGAAGGTCCTTGAAGGTAGCAAAGCGAAAAGAAGAAGGGGGGCGCT TGCGCATAAACAGCTGCTTCTGAGAACGAAAACTACGTAGCATTTCCGAGTCCCGGTGGC CGCTCAGGCTGCCCTTTAAAGAGACGTGTAGGAAGCCCACCCTGGGGCGGCCGTGGGCGG AGCCGCGACCTGAACGCCGGGAGACCTCACCAGGCGGAGGCGGTGTCTACCTCACCAGGC GGAGGCGGTGTCTCGCGCTGTCCTCTGACCGCCAGGGGGAGCCCTGCCGCGCGCTG CGCTCCGGGCCGCCGCCACGCTCTCTCGACCCGCGCGCCCCGCCGCACCACCCGTCG CCACGCCGCCGCAGGCCAAGGGCCAGTCACTTGCGGGCCGGCGTCCCGCAGCCCATTCG  $\tt CGCCCGCCCTGCCCGCCGCGGGATGAGTAACGGTTACGAAGCACTTTCTCGGCTACG. \\$ ATTTCTGCTTAGTCATTGTCTTCCAGGAAACAGCTCCCTCAGTTTGGAATCAGCTCTCCC CGCCCAGCCGCCGTCCGGCCTCCCTCGGGCCCGAGCCAGACCAGGCTCCAGCCGCGCG CGCCGGCAGCCTCGCGCTCCCCTCTCGGGTCTCTCTCGGGCCTCGGGCACCGCGTCCTGTG GGGCGCCGCCTGCCTGCCCGCCCGCCCGCAGCCCCTTCGCTGCGCGCCCCTTGGGCGGC CGCTGCCATGGGCACCGACAGCCGCGCGCCAAGGCGCTCCTGGCGCGGGCCCGCACCCT GCACCTGCAGACGGGGAACCTGCTGAACTGGGGCCGCCTGCGGAAGAAGTGCCCGTCCAC GCACAGCGAGGAGGTGAGCGTGGCGACACTCGCCGCGGGGCTCCCGGGGCAGGCCTCGGG TCGCGCGCACCTGGGCTCCGCCGCGGTCAGATGCTGAGGCCAGTGTCGACGCGACCTTG GGTCCAAACCCGCTGCCGAGGGCAACGCGTCTAAAAAACTTAGCCGGTGCAGCTGCGCAC TGAGTGACACCTCTCTCGGTGCTTAAGGCTGGTAGCAAAACTCTCAAACATCCTGGGTCC CTCTTCCTGGCACGGAGGTCACAGAGGGCCAGGACGTCGCTCCGTCTCTCCCACATCTC TCGCTTCCTTCCCCACCCTGTCCAGGTAAAGGAATATTTTCGGAGATTATCCTTTGGTG CATTCAGATGAAGTAGTATTCATAGTACACCTAACTTTTAGAATGTTGACATTAGACTCT CTATTGCAGTGAGGCAAATGAGTAAGCACTCAATTTTGGCTTTGGAATACCCTAAATACC TACACATTCTATGCATGTAACAATATCATTGTACATTCTATGCATGTAACAGAATATCAC ATGTGCCCCATAAATATGTACAAATATAATCTATCAATTCAAAAATTAAAGTTTTGTAAA **AACTGGAAAATAAAAAGACTAGTCACTAGTTGGAGGTGACAGAGATTAATCTGGAATTAC** AAACTTGTTACCTATTTGTTGGCCATTTCTGAGCGGATAGTCATCCACTGCACATTGTGC ATATTGGTGGTATGGGACAATTTTAGTATTTAAAAAATAACAAAATCTTTAGATTTAGGA GCTATATGACTTTGGAAAATTACTTTAAAGTTGGATAATAACACCTTCCTCATCAGGTTG CATCTGGTTCCATCAGAAAGATAAATCTTAATTAAGAGAAAAACCTTCCTAAACTATGTG TGTTTAGAAAAACCTTCCTAAATCAGCTGTGTTCCTAAGTGGTTTCTGCTCTCTTCTATG AGATGTTGGTAACAGACCATGCAGCAGCACACGGCATCCCTCTGAGTTAAGTGCTGGACC CTTTAGTAGGAATCTGAGTCTGTACCATATTCTGTGTTCACGTTCCAGCTCAGTGTGTAT GTTTTGTTTTATTTAAACCACCTACTTTGGCTGTTTCTCCCACAGATAAATATTTCTGTA TTCGGTACATAGACTCTTAATTTCTTCCAGTACTGTTGGTGGTAGTTCAATACAGAATTT

TGCACGTATATTGATATTATTGGGTGAAATTTTACCTATCTCACAATAGCATACTCTAAA GTAGTGACTCAAAAGAGTTTCTGACTGCAAACACAGTAAGAAGTACATTTTACTTTGCAA TCCAGTTAATAGTTGTATAATCAGTATATCTGAAACAGGTTTCACAAAAAGATATTAGCC CTTATACCGTATATTCTGATTTTTTCTTTTATTTTAATTTTTAAAATGTTGATTTCTTGA TGCTCAGAGTCACACCACAGTTTGTAAAACATTGTTCAAAGGACTAATTCTGGTTTCT AGTGTTTTATTTAGGGTGCTTCATAACAGTAGGATAAAACTAAAGAAACTAGAAAACATT TCAGGAAAACTTGAAGGAATGGCATCATACTGTAGGGAAACTATGACTGCTTGGTAAGAG CAAAAGGGGAGCACATTTTGTTTCTATGTAAAAGAACTTTGTAACACCCAGAGCTCCAA ATTGGGATGTACTTGGAACAGTTCCGCTTCACTGAAGAAATTAAGTAAACTGAACAA ATCACTTATTTTTGAGAAAATGTACGTGTTGGGTCAAGAGTTCAGTTAAATTTCTTACAA GGTCTCTTCTAGTTCTAATTTTTTAAAAAATGTTATGACCTCTGCCCAGATTTTTTTGTCT CACTGGAATTTTATGAAATCAAATAGTTTGTAAGTGGACCATTATAGGACTGTTTTGCCC AGTTCTTTGTTGTAAGGGTGTTTGACCGGTTGAATCATGGTATTTAAAAAATTCTTATAC AACTCCAGATCTAATGGTAGGCTAAGTTGTGGTGATGCTTATACTCAGTGATATTGGGTG TGTATTATAAGAATGAAGAGCGGAGAACAAACATAAACATTAATGTTAATGACAAACA TTAACCCAAGTACAAGGTTAATGTTTAGTCAATATAGCAAACATGTAATTTACAAGATTA AAAATAATTAGGCTTGTGATAAAGTCAATGAATTTCCTACGTAATTGTAACATTAGACTG AAGAGGGTGAATACTATAAAAATAGACTTACCTTCCTGAATTGAGGAATTCATCAGGAAA GCCTCAAGTGTGCAAATGAGCCATCCTTCCAGAGGGAAATTTCTTAGAATTATCCCACGA TTTGAGCCAAAGCACTTCCGATAGAATTTTTAACCTCTAGTTGGTTCTGCTCCTTCCATT TTTACTAATTTTTAAGAAAATACTATGACTTATAATTGTATCTGGAATGATTATCAACTC CTTTTCATCCACTGACTTAAATTTGATTATAAATATGCTTTACATAAAGATCTAGACCTT ATAATTTGAATTCAAGTGAATTGTTGTGACTAGCATGTAAATTATTATTATGGATTGTAA ATCTTAACATAGGTAGTTCTGTGCCCTTAAATTGATAAACCAGTTATCTCTTGTAATCAT GTGTACTAAGATATACGTAGTAAAGTGATTGTATCAGTTTTTATCATAAGCAGTCATAGT TCAGATAGTTCAGAAGTTTAGTGTCTGCTGTTTCTATTAGGAAAGTGCTTTTGCAATTCA CACTGTGTCCTTGGTTATCTAATAAGGCAGTGATTTCAGATTGCCAGGTTTGGCCCATTA GAAGCCATTAGAGTGCCTGGCATGTTGTGAGCATAAATACCGCTTTATGACTGTTTTGTT TAATATTTGTATAAATTTTTTTTTTTTTTTATCTAAGAAAACATGGAAGATAGGTTAGAGGT GCACCTAAATGTTACGAAATGACTTCTGGAGTGTCATACAAGTTGAGTTCTGCAAGATAT GTCTATCCTGGTGGTTCTCAGACTTTAGAGTACGTAGATAAAGTACTCTCCTTAGGATGC TTGTTAAAATGAAAGTCCAAACTGCTCTTGGAGAATGATTCAGTGGGTCTAGGATTAGGC TCAGGAGTCTGAAATTTTAATAAACAGCACAGGTGAATCTGAGGTAGGATTTACCAGCCA CACTTATTCTCTAATAATTTAATTTGTTTTGTCTTTGAGAAATGTAGCATAGTTGTGATAT GAATTCTAGTCAGACAGCCTGGGCTTGACTCCAAGTTCCTTTGTTTATAAACCTTATTTT CCCAGGCTGGAATGAAATGGCATCATCTCAGCACACTATAACCTCCACCTCCTGGGTTCA AGCAAAATTGTCCTGCCTCAGCCACCCGAGTAGCTACTACAGGCCTTGCACTACTAGGCCC  ${f ACATGATTTTTGTATTTTAGTAGAGACAGGGTTTCACCATGTTGGCCAGGCTGGTCTTG}$ AACTCCTGACCTCAAGTGATTTGCCCCCCTCAGCCTCCCAAAGTGCTGGGATTACAGGCA TGAGCCACTATACCTGGCCTATGAATGCTTTTGTGTCTCAACAGTTAGCTTAAATTTTCA CTGGTACAAAAAAGCTTTAAAGTAATTAGACAACTTCTTTAGTTCAAGAACATTTGAGA CAAATTAATATATTCTTATTGTAGAAGTACAGAAAAGTATATAGACTTTGATTAACAGTT TTCCCAAATCAACCCAGATTTGGTCAGGGTAAGTGAAATGTGAATGCAAAAATCATGCAG GTCAAAAAGGAAGTAAACAGGAAGTTAATTTCTTCAGTTTTGTGAGGGAAGTCAA ATAGGCAATTAGCCATAAACTCTCTGTGGTTGATTTGCTGAGACGGCACTCTGATCCAGT

AGGCTTATGCATAAAACAGAAAATCTAGACCGTAGGCAACTCTTTAACCAGACAAGATAC TAGGATTCTCATGCTTAATTCTCACCATGGTTTCCTCACTATCAGTGTTTTATTTCAGTT TATATTTGGTCTAGGAGAGGAATGATTATCAATTGTGATTGGTAGATTGCTTTAGTAGAC TCAACATCACTAGAAGTAATTTTTCAAATGTCAGTTTCTGATGAAACAATAAGGAACTGT GTTCCACTAAATGTCAGTATATGGCTACTATCATAAATGTTAATGTTCAAAACCCTAAAA CACATTTTGAAATCCAACTCAGTCAAAGGCTCACAGCACATTACTTAGGCTACTTTAAAA GTATGGAAAAGGACATGTGCTGGAAATACTGGTTCCCCTGGGCATACTGCAACCATGTAA TGAAATGACTGTTTATTCTACTTATGCTTGACTTGTAAACACTTACTGAACCCCTGATAC GTGCTGTGAAAGTGCTCAAGAATCATGGGAAAGCCTTTGCCGTTTACTTTGTATGATATT GTAAATGTAAGTTAATATGTATCTGATTTATATGTACTAATATTTTCTCATTATCCTTGT AAATTATTCATTAAAATACATTCAAATAGCCTTTGCTTTTTTCTGCTGCACTCAGGAAAA AAAAAGTTTTGGTTTACAATGCTTGTGATTACAGGCTGGGCGCAGTGGCTCACGCCTATA ATCCCAGCACTTTGGGAGGCTAAAGCAGGTAGATCACCTGAGGTCAGGAGTTTGAGACCA GGCGTGGTGGTACCCGCCTGTAATCCCAGCTACTCGGGAGGCTGAGGCAGGAGAATCACT TGAACCTGGGAGGCAGAGGTTGCAGTGAGCTGAGATCACACCACTGCACTCTAGCCTGAG TAAGAATAAAATGCTTGTGATTATAAAACTAAATATACTATTGTCATAAAATCAGCAATT, TGGATATTTATAGCAGCTCCATTCATAATTGCTAAAATTTGAAGCAACCAAGATGTTCTT CAGTAGGCGAGTGTATATATAAATTATGAATGCATATATAAACTATCCAGACAATATAAT ATTATTCAGTGCTTAAAAGAAATGAGCTATCAAGCCATGAAAAGACATAGAGGAAACTTG AATGCATATTTCTAAGTAAAAGAAGCCAATCTGAAAAAGCTACATAATGTATGATATCAA CTATTTGATATTCTGGAAAAAACAAAACTATGTAGACTATAGTTTTGCTAGTCTAGTAAA AAAAACTAGTAAAAAGATCAGTTGTTGCCAGGGGTTAGCAGGGACGGAGGGATGAATAGG CAGAGCACAGGATTTGTATGTCAATGAAACTACTGCATATGATATTGTAATGGTGGATAC ATGTTATTATGGTTTTCTAAATCCATAAACTATGCAGCACCAAGAGTAAACCCTAAGA TAAACTGGACTTGGGTGATTATGACATGTCAATGTAGGTTCATCAAGTGTAACAAATGTA TACCACTGTGGTGGGTATGTTGATAATGGGGGAGGCTGTGTGGATGTGAGTGTAGGGAGT GAATGAGAAATCTGTTCAATCTACCTTCTACTTGATATTCTTGTGAACCTAAAACTGCTC TAAAAAAAAGTATATTTAAAAAAAAAAAAACAGGCTGGGCGCGGTGGCTCATGCCTGTA ATCCCAGCACTTTGGGÄGGCCGAGGTGGGCGGATCACAAGGTCAGGAGATCGAGACCATC CTGGCTAACACGGTGAAACCCTGTCTCTACTAAAAATACAAAAAATTAGTCAGGCGTGGC GGCGTGCACCTGTAGTCCCAGCTACTCGGGACACTGAGGCAGGAGGAATGGCGTGAACCC GGGAGGCAGAGCTTGCAGTGAGCCGAGATCGTGCCACTGCACTCCAGCCTGGGCGACAGA AGAAAATGCTTGTAATTAATGTAGAACGTGTTTATTATGTCATCTAGAGTGGATATTATT TTCATTGGTTTCTTTTTAGAGTAAAATTATCTGCTGTGCTACTGTTTCTAACTCCTCACA AGAGAACTCTGTTGTCTTATAGGTTCTCTGATTCTAAAAGGCATTATGGATAATAGAAAA TTTTATAATTAATCAGAAGCATTAAATTTTATATTTGTTTTAAATATTGTGTTTATTATA GGAGTTTCCAGATGTCTTGGAATGCACTGTATCTCATGCAGTAGAAAAGATAAATCCTGA TGAAAGAGAAGAATGAAAGTTTCTGGTAAAGTCCAGTCTTTTCTGTTTATTTTGTTACA ATGTGGGAAATACAGAAATTCTTTTTTAGCATAATTTTACTTAAACTCCAAGATGGAGTT ATAAGAGGTCAGTGCTGCTATTATATAAGAGTCAGAATAGAACTTCAACTTGCTGTTCT TCATGATGATGTCATGTCATGTAATTTATGTGTCAAACTTCAGAGCAGTAGAAAGAT TAAGATGAAGGAGATGGAAAGGATAAAGGGAAGGCTTAGAAGCAGCATCCACCCAAAGCA AGCATAAGCACCCCTTCCTGGTAAGATACTGGTAAGCAATGTGTGAGGTCACCTGGGAA TATAAAAAGAAACCTGGGCAAGTTACATGAAGAGAAAAGAAAATACTGTAACACCCATTCA

GGAAATGTAGTAAGTGACAAATTCCAGAAACTGTACTATACTCAAGGAATACAAAAATGA AAAGATGCGCCATCTCTGCCCTCACCTTACAATTAGCATAGCATAGTCATTAAAAGCTTG **AGCTTTGAAGTTTCGGGGTGTGCAGATTACAGGCTAGTATAATGTTGGGCTAACAAAGAC** TTTAACCTCCCTGAGTCTCAGTTTTCTCTTCTATAAAATGGGGATGTACCTGTTTCTCCG GCTTCTTTGTAAACTGGATGAAATAACAAAAGAAGCACTTAGCACAGTGTTTGCCTCAAA GTAAGTTCTAGGTAGCTATTATTTGCTACCATGTTGTTATTATTGTGGTTGTTGCTATTT TATTATTATTGAGATGGATAATAATAATAAATTACATGTAAGATGAGATAGGGTATTGTC TCTTTTTAATCTAATTATAGTAACTACCATTTATTGAGTCTTGCTTTGTGCCAGGCACTG TGCTTGGTACTTTATGGTTATATTTTCTCATTTAATTCTCAAGACAATCCTGCAAGTTAA GTCTGTTACTGCATTGCATTAGTGATACTAAATAACTTGAAGGTTGTCATACAACCAGTA AGTGGTTGAACCAGGAATCCACTCAGGTATGCCTAACTCCAAAACCCATTTTTTCCTGTT TGTAATTCATGATTTAGTTCCATCTTGGGTCTCTTAGAAGTCCTCAGTTCCTAGAGGGCT TGAGATTTTTTTATAGGTATCAAAATTCTCCCCATATAAAGAGCTTTCCTCTTTCTACCT ATCCAAAAAAGCCTCATCCTTCAGAGAGAGAGAGCCCATTTCAGATGGCACAAATTCATGG ACAGAGAAATAGTATTGGGGGGGGCTTTCATAGAGTTATAGGGGCTAAAGTTAGACCAAA ATAGTAAATACTGACTCTCATCTAGTAGAGAAGCTAGGATGGCTGTTCAATAGGGAGTAA AAGAAACGTAGAAGAAAATGTGTTGCATATATCGAATGTCAGCACTTTATGTAAGGGTAT TCTACCTGTTTGTCTATTGAATACATTTATTTTTTTGAACAGTGAGTTTACATAAAGTAA ATATGTACATATAAAGTTGAATTTGAATGAAACCAAAACCTCAATATTACAAATATAGAA GCATTGTACCTACTAAGTTTTAAAAAAAAATTAATAATAGCATCCTATGTTGTTAGAAGA GCAATTGTTAATTGGTGGTGGTGGTAAACTGGCACACATCTTTTAAAATATAATAAGA CTCACACAAAACGTCACATGCTTTGACTCATAATAACATTTCTAACAATTCATCCCTGGG TGCGAAAACAGAAAACTGGAACTAGTACTGGAACATTTACTAACCTAAATGTTCAATAAG TAGAACTCATTTAATAAATGACACTCTTCAAAATTTACAAAATAATATTCAACCATTAAA AAATGAGCATGTAAAATTGGCTGGGCGCAGTGGCTCACGCCTGTAATCCCAGCACTTTGG GAGGCGAGTCGGGTGGATCACTTGAGGCCAGGAGTTCGAGACCAGCCTGGACAACATGGC AAAACCCCGTCTCTACTAAAAATACAAAAATTAGCCAGGCATGGTGGCGCAGGCCTATAA TCCCAGCTACTTGGGTGGCTGAGGCATGAGAATTGCTTGAACCCAGGAGGAGGTTGCAAT TAAAATTATACACTAAAAACATAGAATACGTTCAAGGCCACCCCTAAGTGGAAAAAAAGC CACAGAATACACAGAAATCTAAACAGTAATTTGGGTGATGAGACTGGCAATTCTTTTTGG TCTTTCTGCTTTTATAGGTCTTCGTTATTTCTACAGTAAGCACATGACTATTAGGATAAA AAAAATCTTGGCCTGGTGTGGTGCTGTAATCCTAGCACCTTGGGAAGATTGTTTGAGACC GGGAGTTCAAGAGCCCCTGGGCAACATATCGAGACCCTGTGTCTACAAAAAAATGAAAAT TAGCCAGGTGTATTGGTACATGCCTGTAGTCCTAGCTACTTGGGAGGCTGAGGTGAAAGG AACACTTGAGCTCAGAAGGTTGATGCTGCAGTGAGCCGTGATCGCACCACTGCACTCCAG CCTGGATGAAAGTGAGACCCTGTCTCAAAAAAAAAATTGTGGTGATTCACACCTGTAAT CACAGCACTTTGGGAAGCCGAAGCGGGAGGGTCCTTTGAGGCCAAGAGTTCAAGGCCAGC CTGGGCAGTATAATGAGACCCTGTCTCTACAAAAAATTTTTAAAAGTAAAGAAATTTTAA GATAACTAAATACTACATAGACATATATTTTAAATATTTTATTACATAAAGGTAAACCAAA TAGAAGAGGAAATAATGTTATGCCCTACTTCATATGACCAAAAACTGGAAGATAGTGTCT TTTTTTTCAGTTTTCTTCTCATTACATTTCAATTTAGTCTTTGTATATAGATTTTGGTT TATTGGAGAATATATAATGTGCTCTATTAATGTTTAAGTCATAAAAATATAAATTTCAAG TTTTTGTTTTGATAAACATATATTTGTTGGCAACTAGCACATGATTTTAAAAGTATAGTG GAACTATACATTTATGTCTTAAAATTAAAACTATAAAGTTATGTGACTGGGAAAGGAAAA ATAATTCATTCAGGATTATCTGACATCTTAGTATTATAGTAGTGTTAATACTAGCATATA 

TTCATTGTAGAATCAAACTCTTCATCATCAACTAGAAGTGCAGTTGACATGGGTAÁGCAA AAACTGAATTTTTTATCTTAATAGTGGACTTTAAATTAGTATAGGTGTATTAGTTATAAC TTGTGCTTAGGTCCAGGTAAAAAGAAAATGAGTTGATTCCAATTTTACCTTTTAAAGTTC TAGCTTAGTTTCTTAAGGCTTCTGTAAAATCATACTGACTTATGTAGGGTCATATTTTGA TATGCAAGAGGAATGTAAAAGGTGTAATGTACTTAAATGTTCACTATCCGTTTGGAGATA GAAGTTCTTATTCTTAGCCCTTTTAGTACTAGAGGTGAAATATCAAAAACCAAACAACGGC AAAAAAAAAAAATCCAAAAAAAATCCAAGTATATCTGTTTTTTAGCACTTAGGTTATTGT GATATTAAAGTTATTCAATACTTAAATAAAAAATTATTCCAGTATTTACATATATTGAAA TAAATTATTTTTATAGAATTAAGAAATTATCTACCTCTATAAATATGGATTAAGACCAAA CATTCAGTTTTTCAGTGTCTCAAGCTTATTCTTTGCTGTGACTACTAGTTACAGAATATT AGGTCATAATTCTTGTGATCATCCATATGCGATAGTAGTGAGCAAGTAGAACTGGAGAAG AAAATTTTATGAAGATAAGGGAGCTACTAAAAACTTCTGGGACCTAGGAAACAAGAAGAA ATTTTGTTCCCTAGAAAGAGGAGCATGTAGTAGTAGCTGCAAGCTGCCTAGGAATAAGGC AGGTCAGAGAAACCCACTTGTCTGCCACACAGAGCAAGTAGGTAAATGGGCACTTACACA TTTTTGAAAGATAGAAATGTTCTAAATGAAAAGTAAACTATGAAATAATCTGTTATTTTG AAAACAAGTGAAGAATATGGACAGAATTCAGTGGGATACTTTGAAAACATTAGAAATATT CCTTGGAGTTGCACAGCTGGATTCTGTGATCATTGCTTCACCTCCTATTGAAGATGGAGT TAATCTTTCCTTGGAGCATTTACAGCCTTACTGGGAGGAATTAGAAAACTTAGTTCAGAG CAAAAAGATTGTTGCCATAGGTACCTCTGATCTAGACAAAACACAGTTGGAACAGCTGTA TCAGTGGGCACAGGTGAGGGATGGCAGGATCATGAGCACTCCAGGAAGAACTTGCCCTTT TCAGTCTTTGCTGCACACTGTTGAGCATCATGCACATAGTGGCCACCCCTGCGGGGTGAC TTTTCCACATGTGGGAGTTTTGTTTTGTTTCTGCAGGAGTTTTGAGGCAGGTTTTATCTA AATÇATTTGAGGTTTTTTGTTTTTTTTTTTTAAATATATCTCTGATTGAACTGAATGTTA ATCCTGGTTAAAATGAGTGACAAAAATACTAGAAGATGTGTGTTAAAACATTTATACCAA ATGAATTAAGGCCATTTCCTTCAGTTCTACTTATGTGCTGAAAACAATAATACCTAAAGA AAAACCTTACGGCCGGGTGTGGTGGCTCACATCTGTAATCCCAGCACTTTGGGAGGCCGA GGCGAGCAGATCATGAGGTCAGGAGTTCGAGACCAGCCTGACCAACATGGTGAAACCCTG TCTCTACTAAAAATAAAAAATTAGCCAGGCATGGTGGCGTGCACCTGTAATCCCAGCTA CTCAGGAGGTGAGGCAGGAGAATCACTTGAACCTCAGAGGCGGAGGTTGCAGTGAGCTG AAAAAAGAAAGAAAACCTTCTTTTCTTTAGGTACTATTAGACCATGGCTCTAATTTC CTAAGTAAGGGAATATTTTATATATAACAGATATTTTGCTGTTATTCAAAGATGTGTAAG TGGTCTAATAACCTACAAAATTATTAGGAAAGTCACTTACTAGCGTTTTACCTTTACTCT CAGTATTTCTTTATTCCTTTTACTTCTTCAGCCTTCTCCTTTTTCAGAGCTTTCAGAG TTTCTTATGGACAGGAAGACCTAGAGAAAGTATTTCCCCTTCTCCTTGATGATAGCCAGA ATGAGGACAAGAAAGTATTGGAGAGACTTAGATGATTCAGAATGTAAATTAACCAGTGTA GCTACTGGAAGCTGTCAATTCTTCTCTTTCAAAATGTGTCTGATTCATAGCCATATTTTA TACTTTAACATTAAAGGTATTTACTTGTATTTGATCCTTTACCTTTAAGAACTATTTGCT CTGTAGCTGAAACCATCACACTTAACAAACTAACAAAAATCATGTTTGTGTTCTAGGCAG ATGTATTAGATTGTTAAATGGTTCTAGCAGGAGACTTTTTAATAGTGTAGTACCAGGCTG GGCATGGTGGCTCATGCCTGTAAGCCCAGCACTTTGGGAGGCCGAGGTGGGTAGATCACC TGAGGTCAGGAGTTCAAGACCAGCCTGACCAACATGGTGAAAACCGCGTCTCTACTAAAAA TACAAAAATTAGCTGGGCATGGTGGCAGGCACCTGTAATCCCAGCTACTTGGGAGGCTG AGGCAGGAGAATTGCTTGCACCTGGTATGTGGAGGTTGCAGTGAGCCAAGATCACGCCAC GTAGTACTGTTGGCTTTTCGTTCCCCTAGTGTTACACTTCCTTTCCCTATTACATAGGG AAAAGGTAATAGGGAATTCCTATTCCCTATTACTAACCTGGGTTAGAAAAGCATATA TTAATAAAGATATTAATGTAAAAGTATTTTGTAAACTTTAATCACTGTGGATTGTGATTT TTCATATGTTCTAAAATTAAGTTATTTTATTGCTTATTGCTTTCTACTTTTTGGTATTATA TTTAATTTAGTAGTGATATCATGATTTTATTTTCACTTCTAGGTAAAACCAAATAGTAAC CAAGTTAATCTTGCCTCCTGCTGTGTGATGCCACCAGATTTGACTGCATTTGCTAAACAA

TTTGACATACAGCTGTTGACTCACAATGATCCAAAAGGTAAAACTGATATTTTCATTATA GAGATTGATCATAAGCTTTTGTCTTACAAAAAGGTATTTGTTGATACATAATTTTAAATG TGGACAGTGATAAAAATACAGTGTTATCTGAACTATTCTTAATGGTTAGTTCAAAACCTA AGGGATCATTTCCTGAACATCTGGTCTTTTGAGGTTCACAAAATATTAAACTACACAGAAA AGATCTTTTGAGACATTCTAAATAGTAATATATATATATCCTATCTAGTATAGCAAAGACT GGACCAAAAGGCCACTTGATTTTTTTAGTTTTTGAGATGGAGTCTTGTTCTGTCGCCCAGG CTGGAGTGCAGTAGCATGATCTCAACCTGACTGCAGTCTCCACCTCCCGGACTCAAGCTC TCCTCCTGCCTCAGCCTTCCGAGTAGCTGGGACTACAGGCGCATACCACCACACTTAGCT AATTTTTCTATTTTTGCAGAGACAGGGTTTCACCATGTCACCCAGGCTGGGCTTGAATT TCTGGACTCAAGCAATTCCCCCACCTCGGCCTCCCAAGGTGCTGGGATTTTAGGCATGAG CCACTGTGCCTGGACAAAAGGCTACTTTATTCAAGGAGATAAATATCTGGAAAAAGTGGC ACATGTAATTTAATTCAAAAACTTAATAAGCATCTTAGGATAGGTAAGTAGGTATTTTATT AAGACGTTTAGTGTTAATCAGAAATATTTGATTAATGAGAATGGCTTGTCTGCCTTTTAT AGAATAATTTTTTACAACATTTTGTAAGATAACTAGAAAGACTTGGAAGATAATATTGAA CATAACTTGCAAAGATAAATGTTTCAGAGAGCCTGTATATTATTAAGTAATGTATATTAC TACATATTTTTGGTATAAATGAGAAATGTTTGGTTATAAGTGAGAAATGTCTTGTGAAAG TTTTAATTCTCGATGACATTTTTATAGAAGTTCTGATTTAATAATATTAGAGGAAATTA TATTTCATAGATAATTCCCGCCGAAAAAATATTCAGCTTTTATTTCCATACCTAAAAAGA TGACACAATATCAGTGGGTTGATTCAGTTTGCTCATTTTAAGAATGCTATGGATAATCTA TTAAGACTTTATACTATTTATTAGCAGTCTACTTCATTCTCATTTCTTCACTGTTTCATC AGAGGAGGGGGAGATGGAGGAAAAGAGTTTTAATAGTTATTTTTCCTTGAATGCCAAGC ATCATGCCAAATGCCTCAGAGAGATTATCTATAATCCTCACAACAACGGAAACTATACAT TTTTTTTGTCAGGAAATAGAGCCTCAGAGTGAAAGGAACTAGCCAAGGTCACCCAGCTGG CTTTGGGCAAAGTTTGAACTTGGCCTAAGTCTTGGATTATTTTGGAGCCTTTTCCACTAT ACAATCTCTTTGATTTGAAACATTAGTATTACAGTATTACAGTCTGAAAACCTTCATCCAT TTTCATTTAAATCATACCAGAATAAAATACAGTGACTTTTGCCTTCCCAGTAGAGCTTTC ACAATCAAGTAAATTGATTTTTTAAGCCATTTTAGTGAAAATCTAACAAATTGTTATGCT GATTTATTCTGAACTATAAGTCATTTAAATTTTAACTTTCCATATGTTGGCAGATGTCAT GTGTCTGTTTACTTTTTGGAGGCTCTTCTAACAGTAATTGTTACCAACAGCTGATGATCC AGCCTGTACCCTCTTCTAGCTTCACTTGAAAAAAACTCAATCCTTTTACTAGTAGGAAAG GAAGTAGGAAAAGATTAAGGTTCCTAGTGTTTTATTTTCACATATCTAAATGTTGACATT TAGAATGTGTGCTAATACATTATTGTTATGGCAAAATATATTGCATATGTATATGAGGAG AGAGATTTAATCCTTTTTTATATTTTTTTGTATTACATAATTTGATACTTAGTTGTCTTTT TTAATTCTAAGACTTTTGGTGAAAATGTATAGGCTTATCCTGCATTTATCATTAATGAAC CTTCAGACACTTTAATCTATAATGAAGCAACTCTCGATTTAATTTGTCATGTTTACTGAC TAAAGAGTTCAACCATAATTAAATTTTAAAAGCAGTTAAATGAATAGCATAGTCTCTGAT TTTGTGTCATATTTTTATTTTTTAAGCAACCAAACTGAAAAAACTGTAAAACATT<u>TAA</u> CTCTGTAAAATTTAACTCTGTAAAACTGTAAAACATTTAACTCTGCTTGTCATCTAAAAT AGAATTTTGTTTATAAATTCCCTGAAGGTCTACCCCTGTTCTAAAAATTACCCTTACTCC CCATAATGGGTTTATTTTCCATTACCCTTTGTTCTAGAAGTGTAATAACAATTTAACTAG AGAGTAAAATTGTAAAGTAGATGATCCTGAATTTAGAACTTTCCATTTTTATTTGTTCCC CGCCCCCATTTCGATTAAATCCAATCTGTATTATGTCTCTTTCCCTCAGGGTCTTCTCT GTTAGAAAATCTGATAAACAAATCCATATTAATGTTACTTTTCCAAGGAGACATTTGTGT TCTATATATGAAAACTACCATTTACTAGTGGTGTGACCTTGGCCAACTTACCGAACCTCT ATTAACTGAGTTAATACATGTAAAGTACTCAGAAAAGTACCTCGCACATGAAAATAGCTA ACATTGATTGAGCGTTTACTGTTAATGCTATTCAGGTATCACAGCAGTTTGGGAGTAGGT GGGTCCTTTAGCACTCCGAAATCAAACTGTGAAGATGCTCACTTAATCCCTATCTGTAGG CACCATTTGCCAGCCATTGTTCTGGGTACTAGAGATAAAGGATCAAGTCAGACAAAAACC TGATAAGTGGTAGTATATGCTATGGAGATAACTTGGCTGAAGGAGAAAGAGTATCCAAGT TAATTGTTGTTTTATATGGTACAGTCAGAGAGGCCTCTCTACTAAGGGAATGTTAATCAG

AGACCTGCAGGAAGGGAGTGAGCCATGTGAATATCTGGAAAAAGTGTGTTCAAGGAAAAG GCAGAAGCTAATTCAGAGGCTCCAAGGTGTGAATGTGCTTGAGGTTTTCAGGATACAGCA AGGAGGTGAGGCCAGTGTGGCCAGAGGAGTGAGGCAGTGAGGAGAGGAGTGGTGGGATAT GGCATCAGAGCAGTCATAGAGAGCTTGGATATAAACTTGGAATTTGCTGGGCATGGTGGC TCACACCTGTAATCCCAGCACTTTGGGAGGCCAAGGCAGGGGATCACTTGAGTCCAGGAG TTTGAGACCAGCCTAAGCAACATAGTAAGACCTCATATCTACAAAAATAATAATAATAAT AATTAAATTAGCTGGCCTTGGTGACGCACACCTCTAGTCCTAGCTACTCAGGAGAATGAG GTGGAAGGATGCATTGAGCCCAGAAGTTTGAGGCTGCAGTGAGCTGTGATCATGCCACTG AAAAAGAATTGGCACTGCGGCACTCTCAAATTATCAACTGCTGGTAGAAGTGTAAAGTA TAGCCTTTCTGTAAAGCAGTTGGCAATATAGCGTGTATCTAGCTTTAAGAATGTACTTGT ACTTTGGCCCTTCATTCCACAGCCAGGCATGCATTTTAAAATGTTCATCATCTGCATCAT AGACATAGTTGATAATGAAAATTTATTTAAATGGTCTTGCAATGATTTAAGTATTCAAAT GCTTAAAGAAAGCATTGCTGGTACAAATATTTCTATTTTTAGAAAGGGTTTTTATGGATC AATGCCCCAAGTGTCATCAGAGCCATTGGTGTTTTCATTTTTAAAATGTCACCTGTAAAA TGGGCATTATTTATGTGTATATGGCTTTTTTTGGCATTCCTGATAAATGTATTATATAAA GTCTATACATTGGATAATAACACTAGTATATTTAAACTTACAGACTTATTTGTAATGCAA TACCATCACACAACTTTTTGTGTGTGTAATAAACCGCTTTTGGTTTGAAAATATTTTTCG ATCACCTGAGGTCAGGAGTTCGAGACCAGCCTGACCAACATGGTGAAACCCCATCTCTAC TAAAATATAAAATTAGCCAGGCATGGTGGTGCATGCCTGTAATCCCAGTTACTTGGGAGG CTGAGGCAGAAGAATTGCTTGAACCCGGGAGGTGGAGGTTGCAGTGGGCCAAGATCACAC TATATTTTTTAAAAAAAGAATGTTTATCCTGGCATTATTCTTATTAGCAAAATATTAGGA AAAACATAAATGTTTTGACCAATAATAAGGAAATATATGAATTATGATATCTATGTAATA TAGTAATGGGGAAATTATTAAAAATGATCTTTTCACAGACTATTACATGGGAAAATATTC ACAATATAAGTGGAAAÂAGATAAGCAAATAAGGCTTTAACTACAGTGTGATTTCTAATTT TGTAAGATATGGATATACACACACACATACAGATATAAGATCTAGAGATATATAGAGATT CAAGATATGGATGAAGATATATATATATATATGAAGATATATACTCATATACACCAAAAA AGTTGTAAGGAAATGCATGACAATGTTATATCATCTCCAATTGATAGGATTATCAGTTAC TTTTTTTTTTTTAGACTTTCCTGTATTTTCCCTGACTATACATTAGAATCACCTGGAGA TCTTTAAAAAACTGCAGATGTCTAGGCTCCACTCACCAAAAGTTAAGAATTAAATAGGCT GGGGTACAGGTGTAGATACTTTTTAAATAACTGCCTGGGAATTTCTAATATTCTGGTTCA GATTCATAGCACACACATGAAGAATAAGCATATTATATATTAAATGTTGAGGTGTTTCTT TTGTTATGTTAAATGCTTACCTACATACTAAAGTGCTTTTTTGTTTTCCAATTTAACACG  $\tt CTGGAGTTTTGTTGTTGTTTTTTTTTTTGAACTGCTTTCTGAAGCAAGTTTCCAAGAA$ GCTCTTCAGGAAAGCATTCCTGACATTCAAGCGCACGAGTGGGTGCCGCTGTGGCTACTG CGGTATTCGGTCATTGTGAAAAGTAGAGGAATTATCAAATCAAAAGGCTACATTTTACAA GCTAAAAGAAGGGGTTCTTAACTGACTTAGGAGCATAACTTACCTGTAATTTCCTTCAAT ATGAGAAAAATTGAGATGTGTAAAAATCTAGTTACTGCCTGTAAATGGTGTCATTGAGG GCCTCCATATCAATCCATTCTCATGAACCTCTGTATTGCTTTCCTTAAACTATTGTTTTC TAATTGAAATTGTCTATAAAGAAAATACTTGCAATATATTTTTCCTTTATTTTTTATGACT AATATAAATCAAGAAAATTTGTTGTTAGATATATTTTGGCCTAGGTATCAGGGTAATGTA TATACATATTTTTTATTTCCAAAAAAATTCATTAATTGCTTCTTAACTCTTATTATAAC CAAGCAATTTAATTACAATTGTTAAAACTGAAATACTGGAAGAAGATATTTTTCCTGTCA  ${ t TAGCTGTAATAATTTAACCTTGTATTCTTGTGCCATATTCTGTCTTTTTATTACTTATAA$ AGACAAACCAAAGTAAATCTGAAAGGAGACTAGAAGCTTTGAAATTATTGTTTGGGGGGTT GTATATATTGCTACTCATTCAAGAATCCTCAATAAGTATTGAGTATTTACCATATGTTGG

GATACTGTGGGCTCTGGAGAGAGGGGGGGCAATAGAGCTAGGAATTAAGAATCAGTTGA AGGGGATGAAAAAAAATCCTTAATTCAGGGCCGACATTATCTACTTAAACAACTTTGAG **ATATGGTCTTAATTATTTTAAAGCAGAATAATATAATTGAAAGTTTATAGCTAAAAGAGA** CTATATAGGTCATTTAGTATAATTCTTCATTAGTTTACGAACCACAAAATTGCAAATAAA TAAGCTATGAACTTTGATGTACACTATAAATCTCCTTAATTCTATAAATTTGTGTCTGTA ACCTGAATAGTTTGAAAACTTCTTTAAAAATCTCTTGTATTTCATCCGGGCGCAGTGGCT CACACCTGTAATCCCAGCACTTTGGGAGGCCGAGGTGGGCAGATCACGAGGTCAGGAGTT TGAGACCAGCCTGACCAACATGGTAAAACCCCATCTCTACTAAAATACAAAAATTGGCTG GGCGTGGTGGCACTCGCCTGTAATCTCAGCTACTTGGGAGGCTGAGGCAGGAGAATCGCT TGAACCCGGGAGGCGGAGGTTACAGTGAGCCGAGATCACATCACTGCACTCCAGCCTGGG CGACAGAGCGAGACTCCATCTCAAAAAAAAAAAAAACTCTTGTATCTCAATATTTTTAA ACCACAGGCCTAAATAAAACTAATTTTGCTCAAGTTTTCTCAACCTAGGGAAAAAGAACT ATGGTTCCATATTCAAAATAATATTATAGACCCTTTTCCTAAGTAGGATTTTGTGGTTT ACTGATTGGGTAATTTGATCATTAAAATTATGTGAAATCTGCCCGGGCACACCTCATGCC **TGTAATCCCAGCA** 

Figure 7: Nucleic acid sequence of GSS: NT\_028392, position 1352038-1381802 (SEQ ID No: 19)

CACAGCAGCCTCCGTCTCCGGGGCTCAAGAATTCTCACGCCGCAGCCTCCCGAGTAGCTG GGATTACAGGCACGGGCCAACACCCCGGCTAATTCTTGTATTTCTAGTAGAGACGGGGT TTCGCCATGTTGCCCAGCCTGGTCTCCAACTCCTGAGCTCAAGTAATCCACCTGCCTCGG TTGTTCCTGCAATTTGGAACACTGTCCCCATCCCAGCCTCTCACCTCTACCCTCC TTCACTACCTATACCTTCCTATCCATCCTTCAAGACCCCAAAAACCATCCCTGATTCCTT GGTTAATTCCCTAGAAGCTGGACTGATACATTCCATTTAACTAAAATTCGTATCAGGTGC TTCGGACTGCAGACAAGCCTATCACAACCCAGAAGGAAGAACAGGGAAGGCACCTGGGG GCTGCCAAGCAATGAGGTGGGGGGTAGGAATCATGAATCCGCATATTTTTAAAAACTGCC CCAGATCCTGATGTAAACGGTACAAGAGAGTCTGAGAAACACAGGGCTCCCCTCAAACAG TCCTGACTTCAGCATTCCTGGAAAAATGAAAATCCTTTCCTTTTGCCTCTAATGCTTTCC CTGCTGGTATCCCAGGTTAAAAAAAAAATAGATAAAATCAGGGGGATTTTTCTGGGACTTG GCTGGGCTGGGAAACAAGCCTGGGTTCTAATACAGGCTCAGCCCCTGACGTACTATGGGC CCCTGCCCTCCTTGGGGCCTCCATTACCACGGCCACCCCCACCCTTATCAATTGTGTGC CCCTGAGGTAGTGACTGTCCCGCTCTGAGCATTAGTTTCCCCATCTTCCACTAGTCGTCG TCAGCTCTGACGCTCTATGAGCTATGCATACCCGTAGCTCCCCGCCGACCCCGATGGTCC CCTCCCTCCTTCCCAAGGTCCATCCGCCAGGGTGCAGCCGACGCACTCCTAATGCTAAG GCCGCCTCTCATCGACCGCCCCTTCCTGGCCTCGACTCAGCGCCCAAAGGTATGGGTCTC TGCCCCGCTGCTCTTTAAGCCTAGCCGGGGCGGTCAGCGCAAGCGCACTGGGTCGCATC GAGGCCCGCCCCTGAGCCTGGGTAGCGGCGCGAGGCCCGGGAGAACCGTTCGCGGAGG AGGAACGATGTGAGGGAGGGTCTGGCAAGAGATTGGAATTCCGGAGGCCGGGAGACCTT GTGGCTGAAACCCTTCGTAGGAGCGGGGCAACTAGTGTCTAGTGAGGGGGTTGGGCTGGC GCGCACTGATCCCAGACTTTCCGGATCTTCTGCCTTTAGATCGGGCCGGTGTCGGGGCAT GTAGGCCAGTGAGACTGGAGCCAGTTAGAGCTACAACGGGGAGCGATTAGGGCCAAACTT TGTCCAGGGTGGAAGCGAGCGGGCCCGTGAAGTGGGGCCAGCCTGGGCAGCCGACCGTGT CGTTGCCTCGGGGCCTTTCCAGGCACTGGCCTAAGTCCTGGCGATAAAGTGCGACCGATT ATTCATGTGATGAATGAATACAGTACTAAGCGCGGCTAATTACTAGGTAGAAGAGTGATC AAGACAAACACTGTTCCTACGGTACAGGGAAAAGTGATGGGCTGTAGAATGTAGAAGCCC GGGGCGAGAA CAGGGACAGCTTCCGGAACGAAATCGCGAGCCCAGATCAGGAGTGGTGG CGAGAGTTCCAAAGAGAAGACAGCACGTGCCAAGTCCTGGAAGGGGGACAGAGGCCAACA TATCCTGGTCACTGAAGACACCTGACTCTGAATCTGTTTCACGCCCAGGGAAGAGATGAC TATATACTTAGGCAGCAAAATCCATAGGATTTGGGGAGAGTGAGATGTAGGAAACAAGTA CTCAAGGCTTGGGTACCTGGGTGGGGTTCATCAGAGAAGAAGCAGATTTGTGGGAGACAA CAACAAATTCTATTCTGGTTGTATGGAGACTCGCAGGAAAAAATTGGATATTCTAGTTTG <u>AAGGTAGGAAAGTATTGCTGTGAAGATGTAGATTTGAATGTCATCAGCAAAACATAAATA</u> AAGCCAAGGGAGGGTTGAGGCTGTAGAATGAGAAAACAAAGGGCCCACTTAGCACCTTC CTTGTTGCCCAGGCTGGAGTGCAATGGCACGATCTCGGCTCACTACAACCTCCACCTCCT GGGTTCAAGCTATTCTCCTGCCTCAGCCTCCCAAGTAGCTCGGATTACAGGCATGCGCCCA  $\tt CCAGGCCCGGCTAATTTTGTATTTTTAGTAGAGATGGGGTTTCTCCATGTTGGTGAGGCT$ GGTCTCGAACTCCCGACCTCGGGTGATCCGCCTCCCTCGCCTCACAAAGTGCTGGGATT ACACGAGTGAGCCACCACCCTGGCCCATGGTGATTATCTTTATGTCTTATCCTCCCA TATCCCCAGTACCTAGTCAAGGGAGTGGCATTAAATGCAAATCAGTGTTTGCCAACTAAA TAAAAGCCCAACAGCAAACAGATGTTGGAATTTCAGAGTTGTGGAACGATGGGGGCTCAT GGAGGGTTTCATTACTCTAATGTCAAGGTAATGGGTTCTTGTCCTGGCTCTGCCACTAGG.

CTTCTGTGTGACCTCTGACAAGTCTCCTCCTACCTATAAAGAGAGTACAGCCAAAAAATG GTCTCATGTATAGAGCTTCAAACACTGCTGATAAATTTCACACTGATTTTTCTCTTTTAA TCCACACAGCAATCTTACTTGAAAGGGAAGTCGGCTGGGCGGGGTGGCTCACGCCTGTAA TCCCAGCACTTTGGGAGGCCGAGAGTGGGGGATCACGAGATCGAGACCATCCTGGCTAAC ACGGTGAAACCCCGTCTCTACTAAAAATACAAAAATTAGCCGGGCATGGTGGCAGGTGC CTGTAGTCCCAGCTACTCGGGAGGCTGAGGCAGGAGAATGGCATGAACCCAGGAGGCGGA GCTTGCAGTGAGCCGAGATCGTGCGGCTGCACTCCAGCCTGGGCGACAGAGCCAGACTCC TATCAGGACCCTCTTGAGATCACATGCGCATTCTTTCAAAGCATTGTGCTGAGGCTGGCA GACTTTCATAATTGGCCTGGCACTGGCTCTGTCATGGGGACAGGGGGACAGAGCTGAATG TGATGGAGGTTTCCTATTATTCTCTAACTCCCTTCCTGGGGACCACTGAGTTGGGCAACC ATGTTCTGTTAAATGGCAACAGGGCAGAACAAAATTAGTGACTGTGTTTCCAGATTTTTA TACACCTCTGTATGTCTCTGGGCAACCAATCAGACAACTTCTCCTATTACATTGGACACT TGGGTTTCAGCAATTTCCATCTTGCTAATGTGATTTCTCAAAAAATATTTTCTGTCTTTTG GTGCTTTGATGATAAATGTCCATATATGGAATGTAGTCATTTCCTGCTACTAAGATTCCT TCTGGTTTGTATAAGGGAGGAGTTCACCTTATTCGCATTTCATGGTATTCCACAAAGAGC TCCCTCCCCTTCCCATGTAATTTATTTGAGATCTGCTGACATGAGTTGTTGGAGCTTGA AGGGAATTAATAATGTACTGCAGTGACTCCTATCCCAGGAAAACTTGTTAAAAATACAAA GCCTCGGCTGGGTGTGATGGCTCACGCCTGTAATCCCAGTACTTTGGGAGGTCGAGGCGT GTGGATCACAAGGTCAGAAGATCAAGATCATCCTGGCTAACACGGTGAAAACCCCCGTCTCT ACTAAAATA CAAAAAATTAGCCAGGCGTGGTGTGTGTGCCTGTAATCCCAGCTACTCAG GGAGGCTGAGGCGGGAGAATTACTTGAACCCAGGAGGCGGAGGTTGCAGTGAGCCAAGAT ACAAAGCCTCAACCCCTCCTTCCCATCAGGCCTCTTGCATCAGAGTCTCTGGGATGGGGC CCAGGAATCTGTATTCTTTCCCAGCTCCCCAGAATGTTCAGCCAGGTTTGGAAACTGATC GCCCCAGTCACATCTGATATTAGTGCTTCTTTCTCCAATGAAGAGCCTTTAGGCTGGGAG TCCAGAGACATGGGTTCAAGTCCAGGCTATACCAGTCATCACCTCGGGCAAGTCATTTCA CCTCTCCAAGCCTCTGCTTCCTTACTGTGAGAATAATGCCATTGTGTTGGGAATCAAAAG AGAGAGTGGCAATGGAAATGCTTTGTCAAGCTTTCTATTTTGTGCACATGGAAGTTGTTA AGAGCTAGAACCAGCCAGTGTTCACTCCTGTATACCACGCTGTTCCCTTCCAACAGAGGT CAGGGTCCTGCTGTTTGGGGGTGGCCGCCAGCCAGTTTCGGTGGTTGCTGGGCTTCAGG CCATCTGTTACCAACTCTCTCTCTCCATCTTTTGCAGGTGTTGGGATGGCCACCAACTG GGGGAGCCTCTTGCAGGATAAACAGCAGCTAGAGGAGCTGGCACGGCAGGCCGTGGACCG GGCCCTGGCTGAGGGAGTATTGCTGAGGACCTCACAGGAGCCCACTTCCTCGGAGGTAAG CCCCTAGCTCCTCCCCACAGCATTCACCATGGCCCACTGTCTGGCCCCGGCCAGGCTGAG GGTCACTCCTTTGCATCAGGGACCATATCTCTTTTGCCTTATTTTTTCCAGTAACTAAAA TTGATCTCTAGAAGTAGAAAATAAAAAGGCAGTGTCCTGGAGTAATCAAATTTAAATATG GGGTTTGAAGTGTGACTTAGGCAAATTACTTAACCGCTCTCAGCTGCAGTTTCTTCAGGT GTAAAAATGGGATAATAATAGGACCTACCTCACTGGTTTGGTAAGAGAATTACAGGATGA TTCATGTGAAGCACTTTGCCCAGTGAGCTATTACTGAAAACCCCATAATCACTCTACCTT  ${\tt CTCTGTAACTGGTTTGTGATATATGCTTTCAAGCCTTTCTCTGTGCATTTATATACATAG}$ ATGATATGTTTTTGGTTTTTATTTGTCTGTCTTAGAACTTTCTAATGCCTTCTATTAGG GTCATCTTCATTCTGAGGCATAGTATTCCAGATGTGGGTGTATCACAGTTTAGCTTCCCT CTACTCATGTCTATTTAGGTGATTTCTCATTATTTTATGACCATAAATAGCATTATAGGG AACATCCATGCATATGTCTGTTGGGGCACCTATGTGAGTGTTTCTCCAGGTTCAATACGT AAAAGTAGAACTGCTGAGTCCAAACCACACCTTTTTAAAACCTCATCCTTAGGGAAGAAA AAAAATAAAAAATAAAATCTTTTTTAATTTGGTGACTAGGTAAGACATTTTCATGGTT CAAATTCAAATGGTACAAGAGTTTACCCTAATGCAGCTTGTGTTTTTGGTTTCTTGTTGAT

CCTTTCAGATGGCTTATTCATAACAAGTAACTAATAACAAGTAAATATATTCCTTGGGGC  $\tt CTCGCTCTGTTGCCCAGGCTGGAGTGTAGTGGCACAATCTTGGCTCACTGCAACCTCCGC$ CTCCTGGGTTCAAGCAATTCTCCCACCTCAGCCTCCCAAGTAGCTGGGACTACAGGCATG GTCCAGGCTGGTCTCAAACTCCTGACTTCAAGTGATCCACTGGCCTCTGCCCCCAAAAT TAACTTAACAGTACACCTTAAGACCATATTGGTGACTAAAGAGCTGCCAACATCTCTTCT TTTTTTAGCCAGACCCATTCTTTTTTGTCTCTGTGTGCCCAGAACCTACACAGGCCTGAT AGGCAGGCTGATGGTATGGAATAGAATTGCTTGGGCTGTGAACCTAGATTTTGTGAATTA  ${\tt CTTGTATGAATCTAAAATGAAGCATTTTCTCTTCTCCACGCTTTTGTTTCTTCTGTTAATCA}$ ATAGGTACCATGTGAAGATCCAACACTTGGTCTTTCTGGGAGGTTATGGAGCCTAGAAAA TTTACCAAATGCCTGCTCTATGCCGGGCCATTGTAGGCACTGAGGACAGAGAGGTGAGTC AGCCAGAGCCCTAGCCTCTGGGGCTCCTGGTCTAGTTAGAGAACATACCACAAAACAAAA TTAAATAACATCAGCTCTATGAGGAAACACAGGCAGTCTGCTACAAAAGTTAACTATCA TTTATTGAGTATTTAGTATGTGCCAGGCATTATTCTAAACACTTTGGAATCACTGACTCC ATTTAAATGGTAAAATAATTGGCAGAGCCAGGATGTGAACCCAAGGAATTTGGCTCCTGA GTCCATGCTCTGAACATCCATGCTTTTTTTCCTCTCCCAAGATACTATATAGGACAGCTG GAAGAAAGAGTAGTTCATTATGATTAGATGATTGAGATGGGGGGTGGTATTTGAACTAGA CCTTAAAAGACAAATAGGGAAAAGGAACAGCATAGCAAGGACCCAAAAGTAGGAAAAGGC AAAAAAAAAAAATGTTCAAGAGAATGCAGCTGAAATGCAGGGCGCATAAGTGGATAT AGTGGGAAAGAAGGCAGGCCAGCGTCAGACAGCCGCGGGGCCTTAGCTACTGGGTGGAGG AGGAGTATGAACTTTATCCTGTAGATCAGAGCTGCAAACTAGCCATATCTAGGCTGAGTA TTTGGCTCCTGCAGTGTTTGGGGAGTTAATTTGTTTTTTACAATAAGTAATACGTTCAAA TACATTTGAACAGGGCGCAAAATTCAAAAGGGTATTCAGTACAGAGTAAGTCCCCTTCCT CCAGCCACTGTTTCCCTGACCAGGGGCAAGCATTGTTAACAGTTGTTTCACCAGAGTAT TTTTAAAAAGTCAGAGCCAACATTTAAAAÁAAAAAATCATGAAATTAAAACAAAAAATCT AGCAACCCAACTTGTCTTGAAAAATTATATCATCTGGCAACTCTGGCCTACTTTCCTGCA TGGCAACAATTGGCTAGAGCAGAGTTCTGGCTGCCCCCTTTAGAGAAGATGCAAGTACTT CTTTTTGCCACAATTCCTATCACTCCCTGTTGCTTCCTGGCTACAAAGCAGAATTTTGTC CAGAGTCTCACTCTGTCGCCAGGCTGGAGTGCAGTGGCACGATCTCAGCTCACTGCAACC TCTGCCTCCTGGGTTCAAGCGATTCTCCTGCCTCAGCCTCCAGAGCAGCTGGGACTACGG GTGTGTGCCACCACGCCCAGCTAATTTTTGTATTTTTAGTAGAGATGGGGTTTCACCATG TTGGCCAGGATGGTCTCGATCTCTTGATCTTGTGATCTGCCCGCCTCGGCCTCCCAAAGT GCTGGGATTACAGGCATGAGCCACCGTGCCCGGCCAGTAATGTCATTTTATGTTAATGTC TCTATCAAAAGTGAGAAGACTGTGTGTTTCAGCCTTTAGCCTGTAGATAGCAGAGAACAG  $\tt CTATAAACTATTGATCCTAAATTCAGGAGGGCATAATGAGCCCTGGGACAGAGGCAGAGG$ GATGTCTTAGCAGAAAAACTCTGAGTTTTTGAGGCCAAGATGAGACTTGTTGGGGGCAGC AGAGCTCTATGTGTTCAAGCCAAGGAAATGCTCCTGTAGTCATCACATAGCTACTCAGGG TATTAGGTCACCCCTTATGTAATCTGCAGTCATTCCCCATTCTAACTCATAAAGGCTTCAG ACTGAATAAACCTTATTCTCACAAATAGCCTTCCTCAGTTTTATCTTAGATGCTGAGGCC AGGGCAGTGGTACACCCTGCAGTCTCAGCTACTGGGGAGGCTGAGACAGGAGGATTGCT TGAGCCCAGGAATTTGAGGCTATAGTGCACTATGATGGCACCTATGAATAGCCACTGTAT GGGTAATTTAGAAATTATCTACCAAAATTTAAAATAGATTTACCTGAATTACTTGATATT TTTACTTTTAGAAATTTAGAATGTATGGACTTTCTCATATATGAAAATATCTAGAATGTA TATTCTAGGATACCCATTGAAACATTAATGGTAATAGGAAAATAAAGAAACCACCTATAT ACTAGATTCAATAAATTATGGTATATCCTAAGAGTAGAATAATATACAGCAATTAAAAAT AATGAAAATGCTCTATTTGAACATATAAGGAAATATTTAAAAAGCACAATGTAGTATAGT 

TGACTGGAAGGATGTGTGAGACACTAGTCTGTCATTTGCCTCTGGGGAGGAGAACTGGGT GGCTGGGGCCCAGTCTTTTCCCCAGGAGACTGGAATGAGAGTGAGACATACTTCTCACTA TATATTCTTATGTCTCTTTTGAATTTTGTATCATGTATTTGTATTACCTGTTAAAAAAAT AATAATATTTTGGCTGGCATGGTGGCTCATGCCTGTAATCCCAACACTTTGGGAGGCTG AGGCAGGCAGATCACTTGAGGCCAGGTGTTTGAGACCAGCCTGGACAACACAGTGAAACC CCATCTACTAAAAATACAAAAATTACCTGGGTGTGGTGGCACACCCTGTAGTCTCAG CTACTTGGGAGGCTGAGGCAGGAGATTGCTTGAACCCAGGAGATGGAGGTTGCAGTGAG CCGAGATTGTACCACTGCACTCCAGCCTGGGCAACAGAGTGAGACTCTACCTCAAAAAAA AAAATAGTACTTTAAAAATAAATATCTAAATACCAAGTTCTAACACCGTAAACTTATACC ACCATAATGACAAACTGATATTAACTCAAAGGTTAAACTCAGGAATGCTTTATAATACAA  ${\tt GTCACAAGATTTTCTTTTCATCTCTTACCCAAGTTCTAGTTCAGTTGTTGGCAGGGATCT}$ CAGAATGCACTTTTCCCTTCTAGAATCAGTGTCCTTGATGGTATTTGGGTTTCTCGTCTA TGATAAAGTCCAAAGAATGCGGAATGCAGCTGAACTCTAGGCCTGTTAACCTGAGTCACC ATCACTAACATTGGTGGAAAAAACACTCCTGGCTTCTACTAAGGGAACCAGAGTTCACTT GTCCTACCCAGTAACCAAATCAAAATCAAAAGGCAAGGAAACTGGAGTGTGAGCTCCTGA GTGTGTGTTTTAGTAACCATCCTGGTTCAAATCCCAGCACCCCGTTACTAGCTGAA TATAATTTTGGATCTGTTAACTGTTCTGGTTCAAATCCCAGCACCAGTTCCTAGCTGAAT ATAATTTTGGATCTGTTAACCTCTCTTTCTCAGGTCCCGTCTCTGTTAAGTGTGGATAAT AATAGTATCTTCCTCACAGGGCTGAATGATGAATCTATGTAAAGTATTTAAAATAGTACC TTGCACATAGTAAGTGCTCAATAACTTGTGGGTTTCTTTTTGTTATTTGCATTTTGCTTT TTTGCTTCTCTCTCAATACGTAGAGATAAACTATCACAGAATCTGGAAGCTCTCTGG GTTCCACTCTCCCCTTCCACTCTCCCAAGGTAACCACTAATCTACAGTTGGTGTGTCCT CAGTAAATATAGGCCAGACTTTCCATGGGATTCCATTTGCAGGAAGACAACCCGTTCACA GGTGCCCTACCCCTGTCCCATTCTCTCTTGATCACAGGTGGTGAGCTATGCCCCATT CACGCTCTTCCCCTCACTGGTCCCCAGTGCCCTGCTGGAGCAAGCCTATGCTGTGCAGAT GGACTTCAACCTGCTAGTGGATGCTGTCAGCCAGAACGCTGCCTTCCTGGAGCAAACTCT TTCCAGGTAGGGGACAGTGAAGCATTGGGGGGCCAGGAGCTGCCAGAGCCAAGGAACTGG AAGATTGCAGAGCCGTGAGGTGTTACTGTGTCAGCTGACTTGGTGGGATAGAGGAAAGGT ACCTCCAAAGAACAAAAAGTCATAGGAGTCAGGAAAGCTGGCTTCTAATCCTGGCTCGAC CAGTTATTTATATGGCCTCAAGCCACTCCCTTTCCTTCTCTGGGCCTAAGGTTTCTTCAT CTGAAAAATGAAGAGACTGGCTTAAATCCAAGATCCCTTTATTGTTGACATTCTGTAATC CGTGACACCCTACTTTGAAGACTGATATTTCCATTTGGAATTAGGGGAAGTCAGCCTGGT TTTGGAGGAAAACAGAGGTAGGGAAGGTTATTGGGTTAAAGTCAGATTTTCTACTTCTCC TAAGCAGCGACACTTTCTTGTCACCTCAGGCCTCTCATCTTTGGATGGGATGGGGTACAG ACTGGGCCACACTCAGGGCATGAGGAAGCAACCTCTGAAATGGTTCAGCCCATCCGCCCT TCTCTGTCTCTTTCCCTTGATCTTTTTTTTTTTTTTCTTCAGATTCTGGGGCAATTTCTTA AAATTTCTTTATTTATTTTAGAATTAAATATATATAGGCTGGGCGCGGTGGCTCAGGCCT GTAATCCCAGCACTTTGGGAGGCCGAGGTGGGTGGATCACTTAAGGTCAGGAGTTTGAGA CCAGCCTGGCCAACATGGTGAAACCCCGTCTCTACTAAAAATATAAAAAAATTAGCTGGG TGTGGTGGCGGGTGCCTATAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCGCTTG AACCCAGGAGGCAGAGGCTGCAGTAAGCCAAGATCACGACACTGTACTCCAGCCTGGGCG ATTCATTGTAGAATTAAATATCTAGAAATATTATGTATTTACATATACATGCTAGATGTG TATATACTGTACAGGTTGAGCATCCCTAATCCAAAAATCCAAAAGCTGAAATGCTCCAAA ATTCAAAACTTGTTGAACACCACATGACTCTACCAGTGGAAAACGCCACGCCTGATGTCA TATTGTATAAAATAATCTTCAGGCTATGAGTATAAGGTGTATATGAAACAAATGAATTTT GTGTTTAGACTTGAGTCCCATCCCCAAGATGTCTCATTACGTATATGCAAATCTTCCAAA ATCCGAAAGACTTCTGGTCCCAAGCATTTCGGATAAGGGATATCCAACCTGTAATTGCAT GTCTTTGATTAATTTTTCAACAGAAATTAGACTTTTGTTGGAGACAAAATCTTTTAAAAA TGTGTGGGTGAATATGAGAAGGGGTCATAATGGTAAGAAGCTTGGAAACCATTGACTTGT AGCCAAAAACCCAATGAGTCATGAATGTATGAATCTGCCCACCACCACCTTGCCCCTGAGCTG TTTCTTGGAATGGGCCCAGCTTTGTACCTGCAATCCTGGATTGTGGGAAACATGAGCAGC

CTGGCTTATAACCCTAATGATGCAATTATGAAGGAGACTTGCAGCTCATCTTTGCAACCC CTGCCTTCTCTGTTCCTCTCTCATACACATATAAACCCTAGTTCCTAAGGGAGAA GAGCCCCTACAAACATGAAGGGGAGCACCTCTTCAGAAAAAGGAAAGTGTGTCTCAAC TT CCTTGGAGGCTGAAGCCCAGCTGGGACTCTCCTCCTAACCAAGGGCTGGCATGAGAGA GCTCACCCTTGGGAGAGAGCTGGCTGAGGAGCAGAGGAACTTCAGGGCAGGCCTGGGCTA CTTGGCTTCCCCCCACTGGTCTGCTGTGACGTTTCTGTAACAAGGTGATTCAGGCTTGAG CAGGTGTGCAGAATCCACCCTGAATCTCAAAGGGCAGTAAGTGTGATGTTAATCACCTGT GGATTCCTTCTTACTGTGGCTCTTGTTGAGACTTCAGAAAACCATACTGGATAGGCCCCT AA CACATGTCACATGTCATGGCAGTACACTGAGCTGTGACGATGAGCCTGCATAGACACA GCCATTACCTTCATGAGGTTTATAGTCAAACAGGAGAGATGACACTAATCATCACACAAA GAAAATGTAAAATTGCAACTGCAGTCAGTGCTGTAAAGGAGTGGTTCTTAGTTCTATGAG AA CACATAGTAGGGGGATCTGACTCAGATAGGGAAGGCTTCCCTGAGGAAATCACATCAT ATGAGGACTAGTTGAAGAAGAACAAACAAACAAAAAAAACCCAGGATATTTAGCTTGGG TCAGAAAAATCTTATTGGTGCACAGGGCATAACTGCTGTCTTCTAATCTCCAAGGGCTGC TG TGGAGGAGGAGGAGAAGGCTCACCCTGGGAGGTCGCAGAGGGTAGGAAAAGCTATGGA GAGTTAGTATTAGGTCAACCAGAAGGCTTGCCAACCATCAGAGCTATTCAAGTAGAATAG ATACATCATGTCATTTTCTAGCTCTTCTTCGGTGCAGTATGTTCAATTCTTTGAATGTAA TATCTTATTGGCTTTTTACCACAACTCTATGATATAAATATAATTATATTCTCCATTTTA AAGATCAGCAAACTGAGACACAGAGAGGTGAAATGATTCCCTGAGGTTGCCTACTAGTGA GT GGTAGAGCTAGGATTTGAACCCAGGTCTAGAGTTGGATTCTTAGCCACTGTTCTCTAC CA CATTGGGGCGACATTCAAGTTTTGGCCAGTAGACTCAGAGAGGATTCAGGAGTCAAT GA CTGAGGATGGGACTCCTTGAAATTTTAGGTCCAATTAAGCCTGCAAAATGTTCTCTGT TT CTTCCTCCAGCACCATCAAACAGGATGACTTTACCGCTCGTCTCTTTGACATCCACAA GCAAGTCCTAAAAGAGGGCATTGCCCAGGTAACCATTCCCAGCCCTACTCCAGTCTGTAA  $\tt CCTGTCCCTCCCATCTCTGTTTGTTTTCTGTTTTGCTTGAAGAATTTGGTCCAGGCCCTC$ AG CTCATGGGAATCTGCCTCTCACTGGTCCTCACTGGGTTTATCCCAGTGACCAATTCTA GGATGACCAGAAGAATGATTCCACTGGGCTTGGGAGTGTTTGCTGGTACCTCTAATCTCT AGGTACTGTCAGCCTTCAGTTTTCCCCACAGACTGTGTTCCTGGGCCTGAATCGCTCAGA CTACATGTTCCAGCGCAGCGCAGATGGCTCCCCAGCCCTGAAACAGATCGAAATCAACAC CTGGGCAGCCCCGGCATACCTGTGGGGTGACATGCTGATGGGTGTACAGTCACTGGCTA GG CCAGGGAACTCCAGCTATGATTGTGCTTTCCTGGGCCCCGGGTCACATGTTGCCCCTG GCCACCCGACAGCAGTTTCCACTTGTAATGAGATCCTTGGTATGTCAGGGAGAAAAAGG ACCTCATAGCTCATCTAGTCCTGTCCCTCCATTGTACAGGCAGAGGGAACAATATCTTGA GAGCCCCAGAGAGAGGAATGCAGGGACTTCTGTCTGGGGGGCTGGGCCTGGTAGCATCCAT TTCTAGCCAGCAGTGATGCTCCAGGTTGCAATGATTTTAGATGGTCTGCAGCAGGATTCC AGACAGCACCTGGAGGCCCAGAGTAAGGGGCTCCAGCTCACTGGGACACTAGGGTAGGTT GGGGTGGGGACAGAGGCTCTCAGGTCTCCTCCAGGCATATACACCAGGGGCCAAGGTTAG GGCAGCCCAGCATATTCCAACCTGAAGTGGATCTTACAGGAATGTGATGGGAGGATGCTT TT TAGTGCTCAGCTGATTCTCAGAGTCATGTTGCTGTATATATGAGGTCATGGGCAGAGG GGTCTTCCAGGTCCATCCAATTACTGAACAGCCATCTCTCTTCCAACAGACATGTTCTCA GTGTCCTGAGTAAGACCAAAGAAGCTGGCAAGATCCTCTCTAATAATCCCAGCAAGGGAC TGGCCCTGGGAATTGCCAAAGCCTGGGAGCTCTACGGCTCACCCAAGTAAGGGTGTGAAA AGGTAGCAGGAGGATCCTGCTTTAGTTTCAGCATTCATGGGTTTAGCAACTTCTTTTCTT GCCAGCCATCATTAGAGAATAAGGGGATTTTTCTAGGAATAGAAACTTATACCTTTACAT GCCAAAATTATTTTAAGGTTTCCTTCTTAAATAACAGATGCTGACTATGATTTAACTTTT TCTTATTGAGTGGAGGTCATCATTATGACTGTCAACAATTGCAGCTTGCTGTAATACAGT AGTGCTACCTAGGGTTAGAGAGGCACGCAAGGCTGTTTGCCTGCGCTAATAGCTCTGACT CT CTCACCCAGGCTGGAGTGCAGTGGTACAATCTTGGCTTACTTCAACCTCCACCTCCCG  ${\tt GGTTCAAGCAATTCTTCTGCCTCAGCCTCCTGAGTAGCTGGGATTTCAGGCGCATGCTGC}$ CACACCTGGCTAATTTTTGTATTTTTAGTAGAGACGGGGTTTCACCATGTTGGTCATGCT  ${\tt GGTCTCGAACTCCTGACCTCGTGATCCGCCCACCTTGGCCTCCCAAAGTGCTGGGATTAC}$ 

AGGCATGAGCCACTGCACCCGGCCTCTCATTCATTTTTTTCTTCATAGTTTTCTTGTCTGTTT CCCAATTCTCAGCTCTTACTTTGACTGCTGTTGGTATGCTTGAATTTGGAATCCTCCAC CCCCCATGCCCATGCCTCCCTTCTGATTTGCTGTGGTTTGGGAAAACAAATGATCCAGAT TGTTATGATTGGGTCTGAAGAGTGTGAGGGCCTCTTGGATGAGTAAATGCATAAGCTTTG ACTACGAAATTTTATGGTATCCTTTTTAACTGCTTAGAGGCATTTTTTTGCTTTCCTA TTTCTCAAGTGAAGATGTTAGGTAAGTGATTTTCAGATCATCGAGGGGCCGCTATACTAA CAGTTATTGCAATGTTAATATAGCATTAATAGTCCTTAATGTACACTTACTAGTGCTACA CCTTGTGCTAAGCTCTGTACATACAGGATCTCATTGAATTCTCATAATAAGCTCTCTGAG GTCAATACTGTTCAACTCCCTCATTTTACAGATGAGGAAACTGAGGTTCTGAGAAACGAA GTGAATTGTTAAGGCTAAGTGATGAGTTGGTGGCAGATĆCCAAAGTCTACCTCCCTCTAA AACCTCCACTCTTAATCATGCTCTTACCTCCAAGGGAGCCTCTCTGTCCTTGCTAAGCCT CACTAAGCCCAAAGAACCTCAGACTGTAAGCATTTAGAAGTCATCAGACAAATATTCTT TCAAGTATATTGGCTAGGTTGTATTTTAAGAGAGTGAAGCCAGGGGATGGGTCAGCTGGG GCCAGAACTGGCTTCCCCCATTGTGAGAGTGAGATAGGTTCTTCTGCTGACATAGCACAT GACCTTGGCAAGTTAGTTCTTCTGAGCTTCAGTTTCCTCATTTGTAAAATAGGAGTAA TAATAATACCTAAAGGGGTGTTAGTGAGAATTAAATGAGATCATGGATCTGAAAAATGTT TTTAAAAATCTGTGGATCATTATGTGGTACTTTCAATAATAATAATAGGCCGGGTGCA GTGGCTCACACCTCTAATCCCAGCACTTTGGGAGACCGAGGCGGGTGGATCATCAGAGGT CAGGAGTTCAAGGCCAGCCTGGCCAACATGGTGAAACCTTGTCTCTACTAAAAAATACAA AAATTAGCCAGGCATGGTGGCAGGCACCTGTAGTCCCAGCTACTTGGGATGCTGAGGCAG GAGAATCACTTGAACCCGGGAGGTGGAAGTTGCAGTGGCCAAGATCACCCCACTGCACTC AATAATAATAATAATAGCTATCATTTGACAAGTATTAGTTTTAATTCATACAACAGCAAA CTGAGGCTAAGAGAGTTTGAATAACTTGCCCAAAGTTACACAACCGGTAAGTATAGAATT CATCTGCCTCTAAAGCCTATGTTCTCTCTACTTCCCTATTCTGCCTTTAAGAGATATGGT TCCACAGTATTGACTGAAAAACTGCATTGGTAGAGCAGATTAATTTTCGTCAATTATCTC ATGATTTTTAAAATTTCTTAAAAATGGAAGCCTGCAAAATGACTTACAATTTCAATTTAG ACAAACTCTCAAAGCATAGGGCCTGTGGTTAGAATGAGTAGAATAAGAAAAGGGGACTAC GACAGAGTTTCGTTTTTGTTGCCCAGGCTGGAGTGCAATGGCACGATCTCGGCTCACTAC ATCCTCCACCTTCCAGGTTCAAGGGATTTTCCTGCCTTAGCCTCCCAAGTAACTGGGATT ACAGGTGCCCACCACGCCTGGCTAATTTTGTATTTTTAGTAGAAACGGGGTTTCTCC AAAGTGCTGGGACTATAGGCGTGAGCTACCATGCCCAGCCATAACACTCTTATTTTATAG ATGGGAAAACCAGGGCCCAAGGAACGAAATTGCCTTACCCAAGTCAATTACCAAGACACA CTACAAGTCACTGGCAGAGCCTGGACTACCTACGACTCAGGGGTCCTCACCCCCAGCCCG CATGCGTCCTTAGCTGACAACTTTCCTACTAGGAAACAGACTGCTGAGAACTGCTCAGAA CTGAAGGCAGGAGAGGTCAAATATGTTTTCTGAGCCCAGCTCTGATTGTTTAGCAGTTGG CAGGCTGACTTAATTAGCTGGGGCGTGCAGTTCCTCTTTAACCTCCAGCTGCCAGCCTTC CCCTCACCCATGAGCGGGACAGTTTAGGCTGCAAAGTGAAGAGCAAAGCCATTGGCCCTT AGGACTCTCTCAGGGCAAGATGACTTGTGAGAGCACCACTTTTAGTTTGTCTCTCAGGCA CCCAACTCAAAGCCAAGACTCAGCTTAACATCACATCTGACCTCATGAGATTTCAGGCAA ACCAGGAGAGGGGACTTACTAAGACCTATATTTTGGCTAAGCAGAAAGGAGTCAGGCAAA CAGAGTTTAGACTAAGAGGTTCAGCCAAGGTCAGGAGAAGCAGAGATAGACAAGAGAGGC TAAGCAGAGGAGGTCAGGGAATACACACTTAGAATCCTAAGCCAAAGCCTAGGGTTCCAT GGGTCTCAGGAAGAGCCACAGACACAAAGCAGTACAGTCACAGCAAAAATGGAGTTTGG AGGCTGAGCGCAGTGGCTCACACCTGTAATGCTAACACTTTGGGAGGCCGAGGCGGCAG ATCACCTGAGGTCAGGAGTTCGAGCCCAGCCTGGCCAACATGGTGAAACCCCATCTCTAC TCAAACTACAAAAATTAGCCGGCGGGGTGGTGCACACCTGAAATCCCCAGCTACCCGGGA GGCTGAAGCAGGAGAATCGCTGGAACCCAGGGGGTGGAGGTTGCAGTGAGCCTAGATTGT 

AAAATGTAAAAGAAAAAAATGCAGTTTGGTACTGCTGAGCATTAGCCCTAGGAATCTCT TAGGGGACTGGACCTATCTTTGACAACGGAAATATGTTAGCTGGCAGCCAAACAGATAGT TCCCTGGCATAAGCTTTTCCCTGAGCCCTCAAGCCCCTGCCTCTTTAAGAAATACATGAA TAATCAGAGGGAAGAAGCCACATAAGCCCTAGTGATCTCATTAATACTATGAGATCAAA TGTGGCCCTGTGTACATTATAGGAATCTTGGGAGGGCCCAGGAGATAATGTCGTTGTTTG TAGTTGGCCCTGTGGGTTTCTGTAGGGTTCCATCTTGTGTAAGAACCACATTCCTTTATT GTATCCTTTACAATCTAGTAATAGAGCCATTAGCCCCGGACCCCCTGCATTGTTCTTTTA CAAAATGTTCCTCAATACTCCCACTTGTTTATTCTTCCAGAAAGATTTTAGAATTATGTT AAGTTCTAAGAAAAAGTCCTCTTGGGTTTTTGAGATGGTTTTAAATCTAAATTTTAATTT GCACAGAAATTCATCAACCCATGACATCATTACAATATTTCATCTGCCCACTGGAGAAGG GTCAGAGGCATCTTCATTTTTGAAGTTTTCTATTTTCAGGAAATCATATGTGATAGCATC AGGTGTCTATGCCTGAGGTAATCTCAAGGTTCCTGAGAGAGGGAACATCTGTTCTTTCAG GGAAGCGGTGTTCTTATTCTTATTCCAGGAGGTGGGGCGGTATGGGGGGTTGAGGGGAGAA ACAAAAGAAGAACAAGTTCTATAGTAGCCTCGGGCCACCTGTGCTCTTTCCCCAGTGCTC TGGTGCTACTGATTGCTCAAGAGAAGGAAAGAAACATATTTGACCAGCGTGCCATAGAGA ATGAGCTACTGGCCAGGTAAGTAAAGGAAGGGGGACTTCTAGGTGTGGCTCCAGGATTAG GGGTGGGCACTCAGAACATAGCATCCATTCCCTCTGGCTCTTGCCCATTTTTCCCAGGA ACATCCATGTGATCCGACGAACATTTGAAGATATCTCTGAAAAAGGGGTCTCTGGACCAAG ACCGAAGGCTGTTTGTGTAAGCATTCCCAAGAATCCAGTGGAAGGCTGGTTTATGAAACT ACGCTGTGCTTCTATCAGAGCTGTTGACATTCTGGATCAGGGTCTCCTTAGAGATCATCT TAGTTTTCATATGCCCTAAGTTCCCAAAAGTTTTCTTGCCTCCCTAGTAAGGTGAGGTC AGGCCTGAGAAGCTGAGCTGGGCAGTCAGGGAGGAAGAGGAGCAGCTGGCTCATGCTGTG ATTGGTCTGGATGCCACTGTCTGAGCTCGAGCCTGGATTTGTGTTCCAAGCCAAGCCTTA TCCTTTTCTCTAGGGGCCACCACCAGGTAGATTTGGTGCTACATATTTGGGTAGCATTGC AGCACATATATTTAGACCTAGACCTTTGTGATTGTTAAAATTAAAACTGTCCATGGAATT TCACAATACCACTCACTGTTTTTCAAAATGTGCTTTTATCATAACTAAACAAAGTAGTTA ATTTACTTTTCAGATAAACTAGACAATATCAAATAGGTCAAAGAAAAGGAAAAGACATTT AAAAAGCCTGTGTCTTAATCAGACTCATCATTTTACATGTTTGCGTTTTCACCCTTCACCC CTGCCATTAAAAATTTTTTCATTCTGGTTTCAGCTGCTTTAAGCAGTGGAAATATAAAGT GTGTTTTACTACACATGGCAGTATGATTCTGCTGCTCGGTAATTTCGAGCCAACATTTGT ATGCATTTACCAAATTTGATTCTAGTGACCTTCTTGTTCCTTCTGGCCTTCTTAGAATGA CTCTAAATCTGGCATATTCTAAAGTATTCTGTATGGCACACCTCCCTGTTTTCAGTGGAA GCCCTGGTAGTGTGGATATCTACTTTCACTGGTTCCAGTGAACCCCTGACCAGGCTCCCA CTGTGGGCTGAATTTTGAAAAAGCCAAATTCATCTTGATGCACCCTGAAATAGATTGAAC CACTGAACAAATCAGTTATAATTTAACACAGCAGCCTTCTCCATCCTGTGTTCCAGGGAT GGCCAGGAAATTGCTGTGGTTTACTTCCGGGATGGCTACATGCCTCGTCAGTACAGTCTA CAGGTTGGTATTTTCTGTGAGACCATTCTTTGCCTCCTGGGACCCACAAGAGCTCCACAG AGGGAGCTTGCTAGAACCTCCTATCCTCCCTCAAGCCTTTTGCTACCTATCACTCTA CACAGTCTTCTAGAATTTGAATCCTCAGGAATCCACAGAGCTTCAGCCATTTACACTGTT TCCAGAGATGTGCTGGCAAATGTTTAACAACAATCAGCTCTCACTGGTTGATATAAGCCA GTTCCAGCATACTGCTGACCATTTTTTTTCCTGCCAACTCTTACCTTTCCTTTATCTGAA TCAGAAAGTTTTATCATCTCCTCATTCATGTTAATGACAGTTATATCACCTCATTTTGCT ATCCTACCATGTAGTTTCATTAGTTTCCACATCCATTATTTCATTTAACCCTCACAACCA CTCGGTGAGGCATATAATTATCCCCATTATACAGATGGAGAAACTAACGTTTAGAGAGAT GGAGAGGCTTCTCTAAGGCCCTACAGGAAGTTCCCAGGTTTTCTGACTTTCAGGCCGATG GTATTCCCATTCTCCTCTGCTCCTAACATCCACATCATGGAGAGGCTAAGAAGCTCT GCTCTCAGCTGGGAGATGATAAAGGAGGAAATAAGTTTAGAAATACCATGGGCAGTGAGC TGGAGGTCATGAGCTTGACTGCCTCTGTGTGATGATGGGCAAGTTCCTGACCCTTTCTAG GTCTGTTTCTATGAGCGGGGGGGGCTACACTAGAAAACTGAGGGGGCTCCTTCTAGGTCT GTAATTCATCTAGGACTCCCCCGAGGGTTGAGCTCCACATGAGGAGGCTCTATAGAGGT GGTATCTCGATAGAACATCCTTTTCTTTAGATAGGTGGTTAGCAGTGGTGGCAACTTGCT

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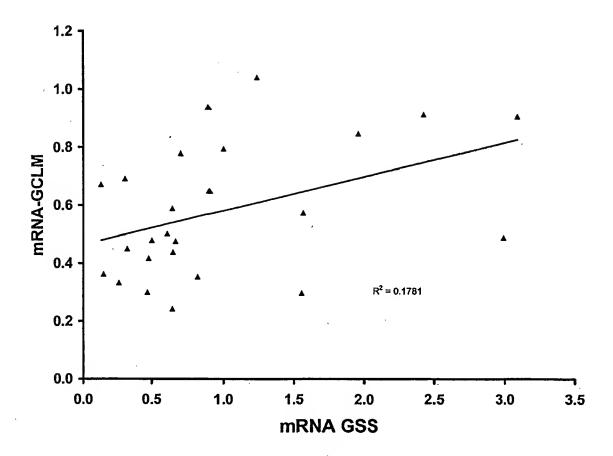
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WO 2005/068649 PCT/EP2005/000337

Figure 8



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Figure 9

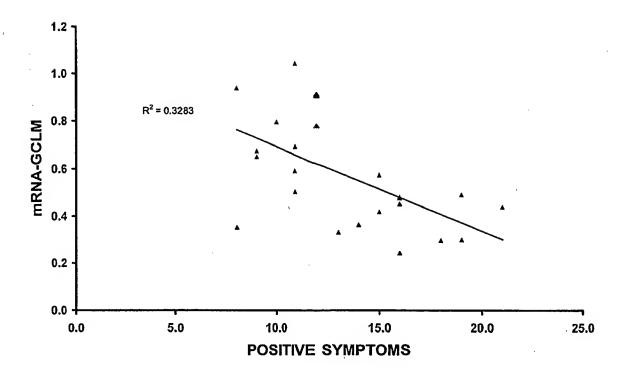


Figure 10

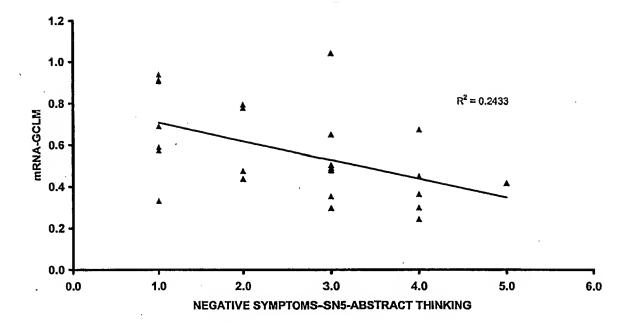


Figure 11

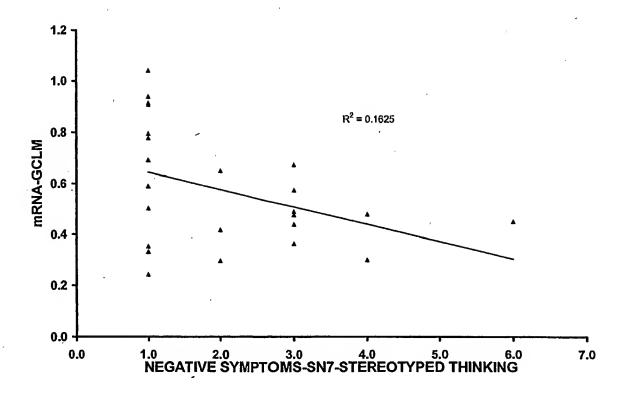


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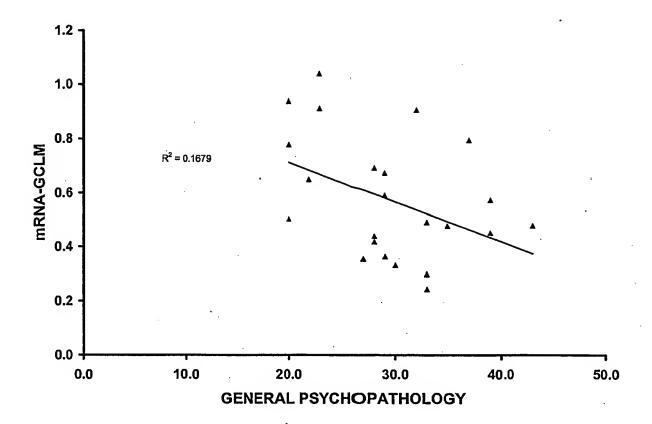


Figure 13

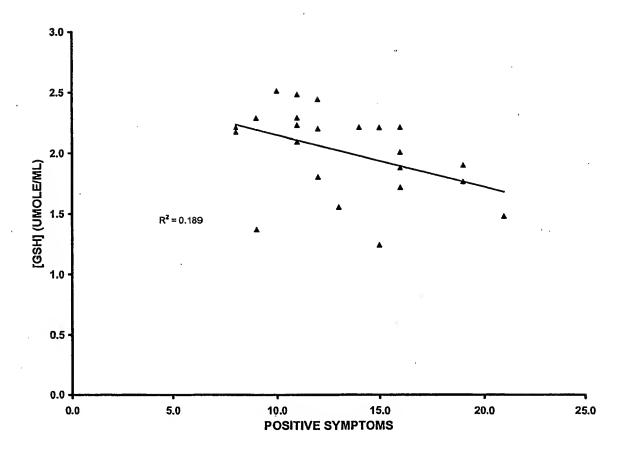


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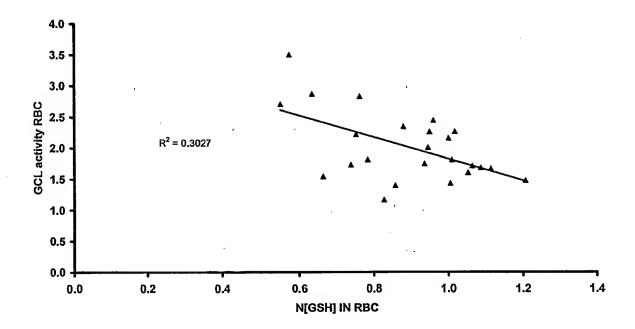


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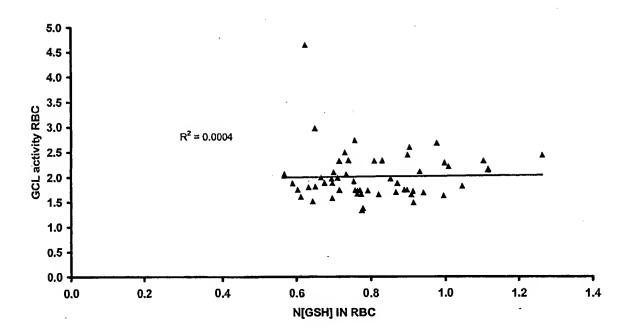


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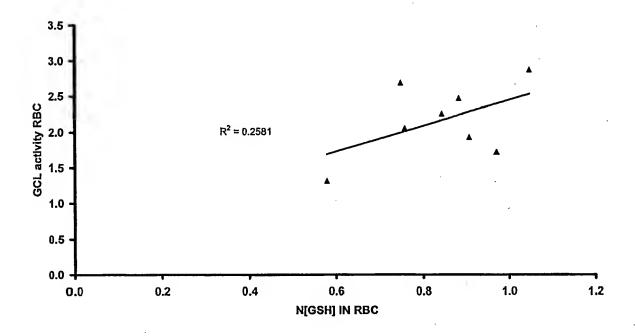


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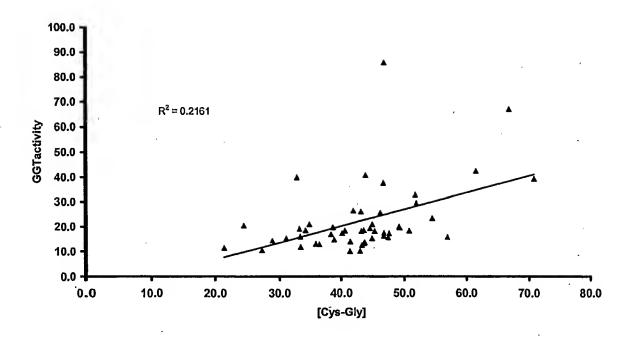


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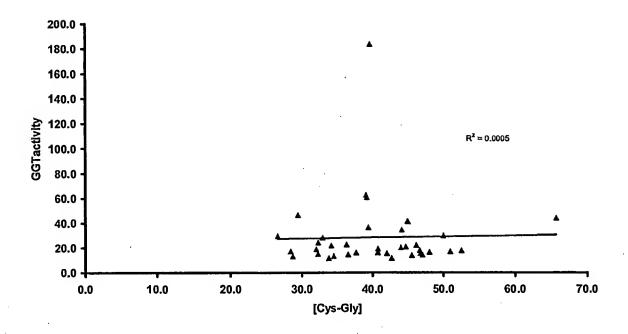


Figure 19

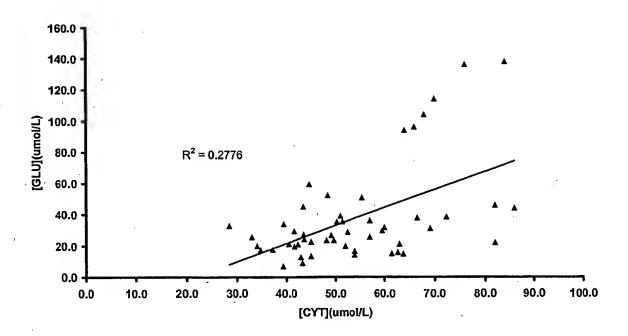


Figure 20

